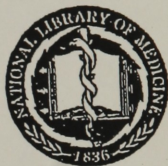


AMERICAN
POCKET
LIBRARY

op *op*
3/- *3/-*

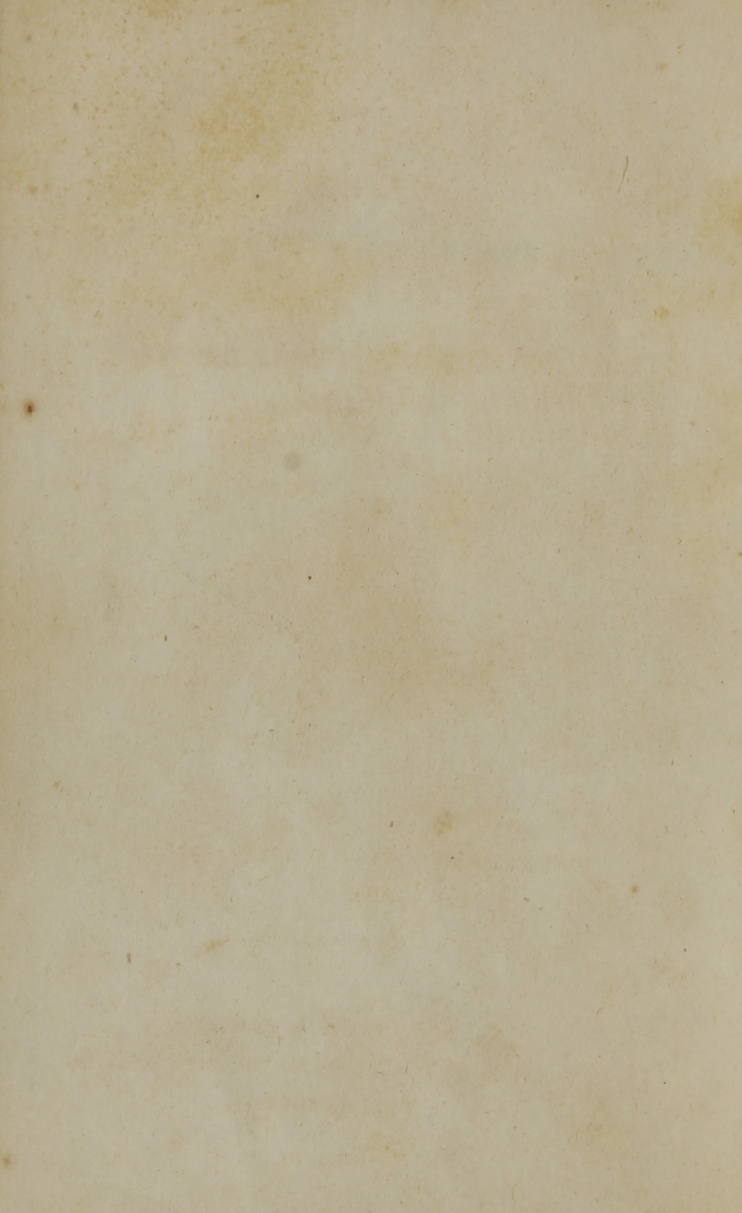
NATIONAL LIBRARY OF MEDICINE
Bethesda, Maryland



a/17

a/17

William Gannon McEitt, M.D.



THE
AMERICAN
POCKET LIBRARY
OF
USEFUL KNOWLEDGE.



John Tyler.

COMPILED BY THOMAS C. CLARKE, PHILADELPHIA.

SECOND EDITION.

GRIFFITH & SIMON,
No. 188, North Third St. and No. 384, North Second St.
PHILADELPHIA.

W

A5125

1841

AMERICAN

POCKET LIBRARY

UNITED KNOWLEDGE



Wm. Lloyd Garrison

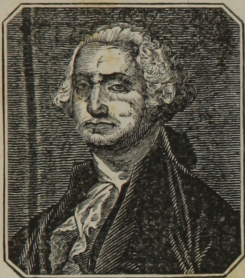
CONSTITUTIONAL RIGHTS C. CLARK, PHILADELPHIA

SECOND EDITION

EMERSON & SIMON

No. 125, North Third St., Philadelphia



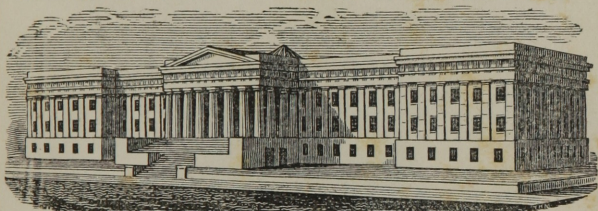


George Washington.



John Adams.

THE
AMERICAN
POCKET LIBRARY

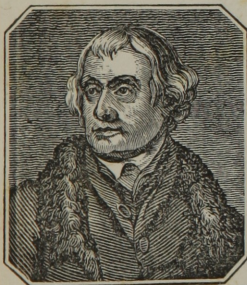


National Gallery and Patent Office at Washington.—Principal Hall 273 feet long, 63 feet wide, and 30 feet high.

OF USEFUL KNOWLEDGE.

COMPILED BY THOMAS C. CLARKE, PHILADELPHIA.

Price 50 Cents.



Thomas Jefferson.



James Monroe.

1841.

Engravings by T. H. Mumford.

Entered according to Act of Congress, in the year 1841, by THOMAS C. CLARKE,
in the Clerk's Office of the District Court of the Eastern District of Pennsylvania.

Stereotyped by J. Fagan, 19 St. James Street.

THE
AMERICAN
POCKET LIBRARY

OF CERTAIN KNOWLEDGE

COMPILED BY THOMAS C. JOHNSON, PH.D.

1841

while the One Thousand receipts of useful knowledge are preserved in a neat and convenient form.

The small type used gives matter equal to five hundred

pages of letter paper manuscript, while larger type would greatly increase the size and price. The read-



James Madison.



John Quincy Adams.

AMERICAN POCKET LIBRARY

OF
USEFUL KNOWLEDGE;

CONTAINING

AGRICULTURE.
FLOWERS.
BIRDS.
HEALTH.
LAW.
EDUCATION.
SILK AND SUGAR
CULTURE.
TEMPERANCE.
STATISTICS.



WILLIAM HENRY HARRISON.

U. S. CONSTITUTION.
PHRENOLOGY.
CANALS AND RAILROADS.
DENTISTRY.
RELIGION.
ARMY—NAVY.
COOKERY.
&c., &c., &c.

WITH UPWARDS OF 1000 VALUABLE RECEIPTS.



Andrew Jackson.



Martin Van Buren.

ing is less trying to the eyes than most newspapers are,

AMERICAN POCKET LIBRARY.

AGRICULTURE.

AUTHORITIES.—*Judge Buel, Sir Humphry Davy, Professor Colman, Pedder, Biddle, J. Quincy, J. S. Skinner, and others; Papers of the Philadelphia Agricultural Society, and the principal Agricultural papers and magazines of the day.*

IMPORTANCE OF AGRICULTURE.

The task of working improvement on the earth is much more delightful than all the vainglory which can be acquired by ravaging it with the most uninterrupted career of conquests."—*Washington.*

The great business of our country is agriculture. Because it feeds us, and furnishes the materials for our clothing; it gives employment to five-sixths of our population; it is the primary source of individual and national wealth; it is the nursing mother of manufactures and commerce; it is essential to national independence. Agriculture is worthy the most liberal patronage of our governments, state and national; it ought to be enlightened by a better (and thorough) education of the agricultural class. Agriculture, manufactures, commerce, stand together; but they stand together like pillars in a cluster, the largest in the centre, and that largest is agriculture. We live in a country of small farms; a country, in which men cultivate with their own hands, their own fee-simple acres; drawing not only their subsistence, but also their spirit of independence, and manly freedom from the ground they plough. They are at once its owners, its cultivators, and its defenders. And whatever else may be undervalued, or overlooked, let us never forget, that the cultivation of the earth is the most important labour of man. Man, without the cultivation of the earth, is, in all countries, a savage. When tillage begins, other arts follow. The farmers, therefore, are the founders of human civilization. If there lives the man who may eat his bread with a conscience at peace, it is the man who has brought that bread out of the earth by his own honest industry. The profession of agriculture brings with it none of those agitating passions which are fatal to peace, or to the enjoyment even of the common blessings of life: it presents few temptations to vicious indulgence; it is favourable to health and to long life; to habits of industry and frugality; to temperance and self-government; to the cultivation of the domestic virtues; and to the calm and delicious enjoyments of domestic pleasures in all their purity and fulness!

Measures (a Substitute).—A box 24 inches by 16 in. square and 28 in. deep, will contain a barrel. A box 16 inches by 16 8-10 in. square, and 8 inches deep, will contain a bushel. A box 8 inches by 8 4-10 in. square, and 8 inches deep, will contain one peck. A box 4 inches by 4 in. square, and 4 2-10 inches deep, will contain one quart.

IMPORTANCE OF AGRICULTURAL PAPERS.

A good agricultural paper, contributed to by practical and scientific farmers, will be of service in many points of view. It is a storehouse of agricultural knowledge, from which farmers may always draw something new and serviceable. For its contents are made up of the best opinions and best practices, and accurate experiments of the best farmers of the world combined.

The leading object, indeed, in the publication of an agricultural paper, is to afford to farmers a common medium through which to impart and receive instruction. Amongst the most intelligent farmers in the land are always found the best patrons of agricultural newspapers: where the land is in the highest state of cultivation, and where the domestic economy is all regulated in perfect order, you will invariably find agricultural newspapers, and intelligence to appreciate them: but they are seldom met with, where neglect and ignorance prevail! Some farmers may fail for want of sufficient capital, but more for want of sufficient knowledge. There is no class who place more entire reliance on their skill than farmers, yet no one who is acquainted with the general agriculture of the country, will assert that it has yet reached the perfection of which it is susceptible. The intent of cultivation is to obtain the greatest possible amount of produce from the soil; the farmer's object being to raise it by such means as will afford him the largest profit with the least labour; and there can be no doubt, that the more scientifically he proceeds, the more effectually will both objects be gained.

There is not a subject which absolutely admits of a greater improvement than the cultivation of the soil: vast improvements are in progress, and will yet be made to an almost infinite extent; the slumbering energies of the farmer are awakening up, and agriculture, the broad foundation of a nation's prosperity, is unmantling some of the brightest features of her hidden glory!

Encourage your Agricultural Papers.

Musty Grain is made sweet by putting it in boiling water, (double the quantity of grain,) letting it cool in the water, and then dry it well. Skim the water.

A single Weed may draw out the nourishment that would have given fulness to half-a-dozen ears. To be free from taxes, is far less important than to be free from weeds.

From the Address of Nicholas Biddle, Esq., before the Philadelphia Agricultural Society. Oct. 1840.

Besides lime and other enriching substances, the cost of the mere animal manures applied to the soil of England, amounts to three hundred millions of dollars; being more than the value of the whole of its foreign commerce. Yet the grateful soil yields back with interest all that is thus lavished upon it. And so it would do here, if we would only trust the earth with any portion of our capital. But this we rarely do. A farmer who has made any money spends it not in his business, but in some other occupation. He buys more land when he ought to buy more manure; or he puts out his money in some joint stock company, to convert sunshine into moonshine—or he buys shares in some gold mine or lead mine. Rely upon it, our richest mine is the barn-yard, and that whatever temptations stocks or shares may offer, the best investment for a farmer is *live stock and plough-shares*.

* * * * *

No soil can withstand a succession of grain crops; and instead of letting it lie fallow in order to recruit from its exhaustion, as was the old plan, the better practice now is to plant in the same field a crop of roots. These draw their nourishment from a lower region than the grain crops do; they derive a great part of their food from the atmosphere, by their large leaves, which at the same time shelter the soil from the extreme heats; they provide a fresh and juicy food for cattle during the winter, thus enabling us to keep a large stock, which, in addition to the profit on them, furnish abundant manure with which to return to the grain crops. Now this should be our effort—more roots—more cattle—more manure—then more grain.

* * * * *

All these improvements which may adorn or benefit our farms, are recommended to us not only by our own individual interests, but by the higher sentiment of our duty to the country. This is essentially a nation of farmers. No where else is so large a portion of the community engaged in farming; no where else are the cultivators of the earth more independent or so powerful. One would think that in Europe the great business of life was to put each other to death; for so large a proportion of men are drawn from the walks of productive industry and trained to no other occupation except to shoot foreigners *always*, and their own countrymen *occasionally*; while here, the whole energy of all the nation is directed with intense force upon peaceful labour. A strange spectacle this, of one, and one only, unarmed nation on the face of the earth! There is abroad a wild struggle between existing authorities and popular pretensions, and our own example is the common theme of applause or denunciation. It is the more important then for the farmers of this country to be true to their own principles. The soil is theirs—the government is theirs—and on them depends mainly the continuance of their system. That system is, that enlightened opinion, and the domestic ties are more stable guarantees of social tranquillity than mere force, and that the government of the plough is safer, and, when there is need, stronger than the government of the sword.

IMPORTANT FACTS.

“A spot of land which, when pastured upon, will yield sufficient food for only one head, will abundantly maintain four head of cattle in the stable, if the crop be mown at a proper time and given to the cattle in proper order. The soiling yields at least three times the quantity of manure from the same number of cattle; and the best and most efficacious summer manure is made in the stable, and carried to the fields at the most proper period of its fermentation. The cattle, when used to soiling, will yield a much greater quantity of milk, and increase faster in weight while fattening than when they roam the fields, and they are less liable to accidents—do not suffer by the heat, flies or insects, and are not affected by the weather, escaping also many disorders to which cattle always abroad are liable. Each head of cattle fed in the stable, if plentifully littered, yields annually sixteen large double cart-loads of dung.”

A visiter to the farm of Josiah Quincy, quoted in the Farmers' Cabinet, says:—

His farm is extensive, and surrounded by a flourishing hawthorn hedge, but there is not an interior fence on the premises; the whole presents a single field, devoted to all the various purposes of agriculture; no part of it is allotted to pasture, properly speaking, as his cattle are fed in their stalls, and are never suffered to roam over the fields; and the advantages of this system are thus given—formerly, there were seven miles of interior fences to be kept in repair, but by keeping the cattle up, the whole of this expense is saved: formerly, sixty acres of this farm were devoted to pasturage, but now, a greater number of cattle by one-third, are kept on the products of twenty acres, and I never saw cattle in better condition. The saving by these means is enormous, and the immense advantages arising from it too apparent to be dwelt upon. During the summer, the cattle are fed upon grass, green oats or barley, cut the day before, and suffered to wilt in the sun, and the manure which is thus saved will more than pay for the extra expense and trouble. The farm is most highly cultivated, and every kind of grain and vegetables have a place.

Near London, it is the custom to sow large quantities of oats, to be cut green for stall-feeding the milk-cows; these are always sown on land most highly manured for the purpose, with four, and sometimes five bushels of seed per acre; the yield is prodigious, and is found to be one of the most valuable crops that can be grown, coming off the land in time for a full crop of turnips for the winter, or of late potatoes.

Fences. Around each post hill the earth, to carry off the water, and char the end a few inches above the surface. Cedar fences last about 15 years, which should lead owners to inquire where the fences are to come from hereafter.

Manure.—Every farmer can double the quantity of his domestic or yard manure, with scarcely any additional expense. At least fifty per cent. of the nutritive properties of yard manure are lost by drenching of rains, excessive fermentations, and injurious application to soil.

MANURES.

Under the improved system of a rotation of crops, root culture, and alternation of grass and grain, combined with yard and stall-feeding of sheep and cattle, the quantity of manure produced on the farms has in many instances been quadrupled, and the amelioration of the soil has been in the same proportion.

Ship loads of bones have been carried from this country to Europe to be crushed and used as bone-dust in fertilizing their soils; and we have been compelled to purchase, at exorbitant prices, of those nations, the wheat and other grain, that this same manure would have produced at home, and at the same time have lost to our farms the fertility it would have imparted.

Scrappings of streets, leached ashes, lime, refuse from skin, leather and soap boilers' shops, slaughter houses, bones, weeds, salt, and any kind of animal or vegetable substances, by the addition of earth, may be largely increased in quantity and made to enrich and fertilize the soil.

But whatever improvements or discoveries may be made, it seems clear that the farmer for manure must rely mainly on his stables and yards, and his study should be to render these most efficient and available. One main object should be to prevent the escape of the liquid and volatile parts of the manure, as experience proves that these are the most active in exciting or supplying plants with food and thus accelerating their growth. The yards and the stables should be provided with litter, such as straw, hay, leaves, weeds, &c., with vegetable mould or muck, with the wash of roads or the overflowing of streams, in sufficient quantities to absorb and retain the urine and other liquid parts of the manure, and where these cannot be obtained, common earth or dry sand will be found of great utility in preventing the loss which must ensue where these parts of the manure are allowed to escape from the yard. If when the farmer cleans out his yards, he were to cover them with a hundred loads of vegetable or absorbent earth, he would find in the following year a greater number of loads of the most valuable manure, the greater part of which, without such precaution, would have been wholly lost.

Rotted manure may afford at times more benefit to a particular crop, or may be more conveniently applied to some crops; but as a general rule, manure should be rotted in the ground where it is wanted. Some crops are rarely injured by any quantity that can be given them, as corn, potatoes, and roots generally; of course such should have the advantage of the first process of decomposition in the manure, while its after effect is reserved for the grains and grasses.

The great object in the application of manure should be, to make it afford as much soluble matter as possible to the roots of the plant; and that in a *slow* and *gradual* manner, so that it may be *entirely* consumed in forming its sap and organized parts.

All *green succulent plants* contain saccharine mucilaginous matter, with woody fibre, and readily ferment. They cannot, therefore, if intended for manure, be used too soon after their death.

By covering dead animals with five or six times their bulk of soil, mixed with one part of lime, and

suffering them to remain for a few months, their decomposition would impregnate the soil with soluble matters, so as to render it an excellent manure, and by mixing a little fresh quick-lime with it at the time of its removal, the disagreeable effluvia would be in a great measure destroyed; and it might be applied in the same way as any other manure to crops.

Green vegetables, when put under the soil and submitted to the process of decomposition, are efficacious in restoring exhausted soils. Buckwheat and clover are striking instances of this power in green crops to fertilize soils, and both have been extensively used for this purpose.

 PLOUGHING.

Much time and labour is saved in ploughing long instead of short ridges. For instance, suppose the ridges are 78 yards long, four hours and thirty-nine minutes are spent in turnings in a day's work of eight hours! whereas, if the ridges are 274 yards long, one hour and nineteen minutes are sufficient in the same length of time.

Plough deep. Let a farmer examine the extent and depth to which the roots of grain, in a loose and favourable soil, will spread, and he will cease to wonder at the failure of a crop where the subsoil has never been stirred by the plough.

Small fibrous roots of vegetation extend to a depth, where the soil is loose and deep; and where vegetables thus take root they are much less affected by drought. The soil being turned up to the action of the sun and air, becomes enlivened, and better fitted for producing vegetation. An acre of land yielding a ton of hay, at the usual season of ploughing greensward contains more than twelve tons of vegetable matter, consisting of the roots and tops of grass, and other vegetable remains upon the surface. Such a method of ploughing, then, as will be best calculated to secure for the benefit of the crop, this mass of enriching substance, the farmer should not hesitate to adopt. By completely inverting the sward, and laying it as flat and smooth as the nature of the ground will admit, and then cultivating without disturbing the sod, with the application of a dressing of compost, land may not only be kept in heart, but wonderfully improved.

The Plough.—By so placing the coulters as to form an acute angle with the plane of the share, on the land side, the beam is brought more directly over the centre of the plough, as is the case with Prouty & Mears' improved plough, and thereby the power necessary to move it, is applied more directly to the centre of resistance, and the force required to move it, and overcome this resistance, is of course less than when applied, as in other ploughs, on one side.

The difference in the force required for ploughs now in use, has been ascertained to be 100 per cent.; showing the great importance of its structure. The work which one team of horses or one yoke of oxen can perform at one plough, will require two yoke at another!

GRAINS.

General Remarks.

The compounds in vegetables really nutritive, are very few; *farina*, or the pure matter of starch, gluten, sugar, vegetable jelly, oil and extract. Of these the most nutritive is gluten, which approaches nearest in its nature to animal matter, and which is the substance that gives to wheat its superiority over every other grain.

There is a particular period at which each species of seed ought to be sown, in order to bring the plants to a perfect state of ripeness.

The condition of the land is, in fact, the best guide; for, if it be in a mellow state, between drought and moisture, the seed may be put in with confidence. Some kinds, however, prefer a dry and warm soil; others, that which is more humid and tenacious. Thus, barley, rye, and buckwheat, succeed best on the former; and wheat and oats on the latter.

The depth at which seed should be sown is a matter of nicety, as well as of importance. If too deeply buried, germination is impeded, and may be altogether prevented; while, if sown too shallow, sufficient moisture is not left in the surface to afford nourishment to the roots of the plants.

The depth at which seed ought to be placed must, therefore, be regulated by the nature of the soil. If stiff, more moderate covering should be used than if light and porous; wheat, barley, and oats also require more than rye or buckwheat; but, except in a few instances, from one and a half to three inches, is in every case, the lowest to which it should be carried.

Seed should be selected from the earliest and most perfect growth of the preceding year. Too much attention cannot be bestowed on this part of the operation, as every kind of seed will produce its like. Late sowing requires one-third more grain to the acre, than if put in early. Land, naturally very rich and too highly manured, is apt to cause during the hot season of summer a too rapid growth of the straw, at the expense of the seed.

Wheat.

The *white* are superior in the quality of their produce; the *red* are the more hardy; and in general, the thin and smooth-chaffed are preferred to the woolly and thick chaffed.

The produce of wheat sown in spring acquires the habit of coming much sooner to maturity, than the produce of that sown in autumn. Hence the farmer, when he sows wheat in spring, should sow the produce of that which had been already sown in spring, and not the produce of that which had been sown in autumn.

This change in the habit of ripening, though it may at first view appear somewhat singular, takes place in all the cereal grasses, and also in many other cultivated plants. The minor varieties of any species of wheat, under given conditions, will remain unchanged for an indefinite period; under other circumstances, however, they degenerate—and hence, particular kinds that were once valued, have now ceased to be so.

The soils of the lighter class are the best suited to wheat; and it is an error in practice to force the pro-

duction of wheat on soils, and under circumstances which are better suited to the production of the other grains.

No wheat, however clean or beautiful, should be sown without being soaked 12 hours in a pickle of strong ley, brine strong enough to float an egg, or lime water, and after being drained, should be rolled in powdered lime.

As the wheat crop generally receives no after-culture, the soil should be brought into as fine condition as possible. Manuring and thorough culture are indispensable.

If it be desirable to sow wheat after a fallow crop of rye, oats, &c., the land should be immediately ploughed or thoroughly harrowed after it is cleared—then one good ploughing with sufficient harrowing is a good preparation for the seed.

As a large crop cannot be sowed in a few days, it is better to begin a fortnight too early than a week too late.

Two bushels of seed to the acre of winter wheat, is not too much: less than six or seven pecks should never be sown.

By sowing too thin, the growth of weeds is encouraged to the great detriment of the growing crop and the loss of the owner.

Ploughing in wheat is best, especially on worn land. The depth at which the seed is buried is more regular, and gives the young plants a stronger hold on the soil.

Corn.

As a general rule it may be laid down that any crop which matures so large a quantity of seed, must exhaust the fertility of a soil much more than a crop which does not produce seed, such as the root crops.

There is probably no other crop that produces so much nourishment for man and beast as this does. It was the opinion of "Arator," that it was "meal, meadow, and manure." And the manure which might be made from the fodder that is produced, if returned again to the soil from which it was taken, would keep it in a constant state of fertility, and in fact increase it from year to year.

To Plant, plough well in the fall and early in the spring. Manure and harrow well. Select from the best stalks large sound ears—throw out the small, ill-shaped grains from each end. Soak in strong liquid of rich manure 12 hours. Put four grains in hills four feet apart each way. Cover one and a half inches deep, and press down with foot or hoe. Apply leached ashes or plaster, after the corn is up. Use the cultivator instead of the plough, which cuts the roots and makes them bleed—besides, all that is now needed is to keep the ground loose, well pulverized and free from weeds.

The ravages of the wire-worm may be stopped by slacked stone lime.

Of all the grains, corn is the most valuable, taking into view quantity and price. Soaking the seed in a solution of saltpetre keeps off the worm and largely increases the crop.

Topping the stalks diminishes the grain from 6 to 8 bushels the acre, without a corresponding increase of fodder.

Grind corn in the ear for feeding. Pure corn meal does not appear sufficiently to distend the stomach to

bring into exercise its digestive faculties fully, without taking so much as to clog and impair its functions eventually. For this reason, a mixture of less nutritive materials is desirable; and one of our most successful feeders of pork has assured us, that he always mixed oats with his corn, in the proportion of one-fourth, previous to grinding, and thinks he should find a profit in exchanging corn for oats, bushel for bushel, rather than feed the former to his pigs clear. The cob, possessing nutriment in itself, makes about the requisite mixture with the grain, and hence is of great value for the purpose of feeding.

In any district where Indian corn is extensively grown, a miller would find it for his interest to attach a cob-cracker to his machinery, as the farmers would find themselves well repaid by the great saving and superiority of the meal so made, for feeding.

SEEDING.

Of all the practices constituting good husbandry, none are more replete with beneficial effects, and which better repay the outlay, than that of seeding. It has become an established practice with good farmers to seed frequently with clover and timothy.

The natural grasses yield less of quantity and nutriment than either clover or timothy, and some others of more recent introduction.

Independent of this, its fertilizing properties to the soil must be considered. Whereas, grounds not seeded, by being too much exposed, soon become of so compact a nature as to render them in a degree impervious to either heat or moisture, without which they cannot be capable of the least productiveness.

Autumn is deemed the best time for sowing timothy, and the spring for clover.

ALTERNATE CROPS.

The summer and winter food must have a due proportion to each other, and the fields of grain are not to exceed the fields of meliorating crops,—these preserve the soil, as well as produce crops; but grain *reduces* the soil in producing the crops. Aim at income from *live stock*, which *improves*, rather than from *grain*, which *impoverishes* your land.

SAVING CLOVER SEED.

The difficulties of saving the seed are imaginary; the process is simple and easy. After the clover field has been cut or grazed, let the second crop come on.

The second crop produces more seed than the first, and hence the economy of first cutting or grazing the field; though from that cut for hay, a careful husbandman might easily save sufficient seed for his own use. Now when about two-thirds of the heads have turned brown, because, if cut sooner, too many seeds are unripe, and if later, too many shatter out of the heads in cradling and handling.

POTATOES.

Potatoes in general afford from one-fifth to one-seventh of their weight of dry starch.

One-fourth part of the weight of the potatoe at least may be considered as nutritive matter.

The best potatoes are heavier than the inferior varieties.

The American Farmer says: For some seasons past, I have only planted the top eyes, and I have the best crop and the driest potatoes in the country. After the top is cut off, the remainder keeps better and longer fit for use. If housekeepers in towns were to preserve the cuttings of the tops of their potatoes, there would be sufficient to plant *all the country*, without the cost of a cent for seed!

Preserving Potatoes.—Potatoes should be dug during dry weather. They should be exposed as short a time as possible to the light, as it always injures their quality for whatever use they are intended. They should be kept in a state similar to that before they are dug,—that is, secure from air and light, with a slight degree of moisture to prevent withering, and a temperature so low as to keep them from vegetating. The difference in the quality caused by good and bad keeping is very rarely appreciated.

In planting, have a good supply of rich earth around; but elevate the hills as little as possible after planting, in order to leave the tubers to grow at the depth which they choose for themselves. Besides, a more even surface is better adapted to obtain a supply of moisture, by admitting the rain, &c. The distance of the hills should be governed by the space occupied by the tops; for much of the nutriment of vegetables is taken from the air, and the tops should therefore be allowed to expand.

STOCK.

Treat Domestic Animals kindly and tenderly.

Domestic animals of all kinds, from a horse down to a chicken, should be treated with gentleness and mildness; men or boys who are rash and bad-tempered, ought not to be permitted to have charge of them or to interfere with their management. Animals that are kept in constant fear of suffering never thrive well, and they often become vicious and intractable by unkind and cruel treatment.

Keep Stock in good condition.

An animal may be kept short of food in the latter part of the fall or first of winter, at a small saving of food, but at a loss in the condition of the animal. It is like salting a hog with a pound of salt—a saving of salt but *loss of bacon*. One dollar saved by short keeping of animals, will be a loss of five dollars. It will cost more through the winter, and the profit from the animals, either in growth or milk, will be lost.

Provide comfortable sheds and stables. Remember that a *want of comfort is always a waste of flesh*. Give a sufficiency of food and drink, with great regularity. A meal ten minutes later than the usual time, causes the animal to fret, and fretting lessens flesh. Most animals will drink several times a day, and should therefore have it as often as they want it. They should have plenty of clean litter as often as needed. With such management there will be an almost incredible saving of food.

Tight stables should always be ventilated. The breath and manure from animals always causes impure air.

Coarse hay and straw are readily eaten by cattle, when brine is sprinkled upon them.

Corn-stalk fodder should always be cut or chopped, —otherwise the body of the stalk is wasted. This is the best part. It is sweetest and most nutritious. And it is the chief part in bulk. Chop it fine, and cattle will eat it, if the fodder has been well cured.

Quantity.—An acre of corn-stalks, cut and well secured, and chopped when fed, is quite as good as an acre of hay.

Currying.—Nothing contributes more to the health and appearance of cattle, than frequent curryings and rubbings; and nothing enjoys currying more, or shows greater improvement from it, than hogs.

Hoven Cattle.—A band of straw, the size of the wrist, placed in the mouth, drawing it tight, and making fast the ends over the head, just behind the horns, will cause the beast to endeavour to rid itself, by chewing the band; and the act of moving the tongue and jaws will permit the pent-up air to escape.

Over-Feeding.—Administer a pint of cider and half a pound of old cheese, grated and mixed.

Remarks on Neat Cattle.

1. The head small and clean, to lessen the quantity of offal. 2. The neck thin and clean. 3. The carcass large, the chest deep, and the bosom broad, with the ribs standing out full from the spine. 4. The shoulders should be light of bone, and round off at the lower point. 5. The back ought to be wide and level throughout; the quarters long; the thighs thin, and standing narrow at the round bone; the udder large when full, but thin and loose when empty—with large dug-veins, and long elastic teats. 6. The bones, in general, light and clean.

To Select.—Adopt the practice of selecting best lambs every year, for stock. In a few years you have first-rate sheep. The same course will produce the same effects in every kind of animal.

THE HORSE.

There is no more danger of injury to the horse than to ourselves by eating a hearty meal when warm. And who ever heard of a man killing himself with a hearty dinner, because he ate it when he was fatigued or heated?

It is hard driving immediately after eating grain that kills the horse. Not an instance can be shown in which he has sustained injury from eating grain merely because he was warm.

We have known men, prudent in most matters, yet guilty of stuffing their horses with grain in the morning just before starting on a journey!

How absurd to let your horse stand for hours, after a violent exercise, to chop up his own fodder and attempt to appease his hunger on hay.

Give the horse half a bushel of oats or one peck of corn—if he has been used to grain—as soon as you lead him into the stable, and he will fill himself in an hour or two, and be willing to lie down and enjoy a nap, even before you retire to rest yourself.

In any part of the country, if you see the grain put into the manger you may be pretty sure the hostler has not forgotten his duty.

Watering.—If you ride moderately, you ought to let your horse drink at any time on the way; but if he has been long without water, and is hot, a load of cold water, greedily swallowed, will chill and deaden the tone of the stomach: but two or three swallows are really necessary to cool his mouth, and may be allowed him at any time.

Spavins are seldom cured: though cures are made by ——— Rizler, at Frankford, Pa.

Heaves.—Mix ashes in his food, and lime-water for his drink.

Prevent Botts by cleanliness, and giving salt often and regularly; and, occasionally, a few potatoes.

When your animal has fever, nature would dictate that all stimulating articles of diet or medicine should be avoided. Bleeding may be necessary to reduce the force of the circulation—purging, to remove irritating

substances from the bowels—moist, light, and easily-digested food, that his weakened digestion may not be oppressed—cool drinks, to allay his thirst, and, to some extent, compensate for diminished secretions—rest and quiet, to prevent undue excitement in his system,—but nothing to be done without a reason. We might sum all in one general direction:—*Treat your brutes like men.*

Cuts should be cleaned, laid smooth in the natural position, and allowed time to cure.

Sores, when large, should be protected from the air and external irritation.

Bruises and Sprains should be kept quiet, or inflammation will ensue: endeavour to reduce the heat, if more than natural, and avoid the certain 'cure-alls.'

Colic.—The horse rolls and is in pain. Administer a table-spoonful of strong mu-tard, dissolved in a black or junk bottle of water. Wrap the neck of the bottle with twine, to prevent its breaking. If inflammation is suspected, breathe a vein.

A damp stable produces more evil than a damp house; it is there we expect to find horses with bad eyes, coughs, greasy heels, swelled legs, mange, and a long, rough, dry, staring coat, which no grooming can cure.

Lock-Jaw.—Throw two or three hogsheds of water on the spine. The skin becomes loose, then wrap in blankets—feed with gruel and nourishing diet.

Botts are said to be too deeply buried in the mucous coat of the stomach, for any medicine that can be safely ministered, to affect them. *Symptoms.*—The horse hangs his head, is drowsy, and bites himself. Try a mixture of molasses and warm fresh milk, and rub externally with spirits of turpentine; 1 lb. of which may loose the botts—then work them off with a large dose or two of oil.

Lampas (the roof) sometimes grow level with the front teeth, and impede the feeding. Touch with a lancet gently, and allow to bleed freely, instead of the usual painful cure of burning.

Age.—From 5, black cavity, like the eye of a bean, in two middle teeth of lower jaw, is filled up. At 6, the two second are filled up, and at 7 until 8, the black marks of corner teeth of lower jaw fill up and disappear, and the tushes are no longer concave on the surface next the tongue, but become round or convex. The marks being now obliterated, the age cannot be exactly known; though extreme length of upper fore teeth, their yellow or brownish colour and projecting over the under teeth, disappearing of bars in the mouth, and sinking in of the eye-pits, are proofs of great age.

Ring Bones.—Blister of oil turpentine 1 oz., to which add, slowly, vitriolic acid two and a half drachms, lard 4 oz., powdered Spanish flies one ounce and a half. Mix.

Spavins.—Blister, same as Ring Bone, adding oil of origanum half an ounce. Apply. First fire the part.

Sand Cracks, owing to excessive dryness of the crust. Moisten in stable, or turn him out into moist ground.

Verdigris is useful in some cases of soreness or inflammation of the foot.

Corns.—Remove the shoe and cut out the corn. Tack on the shoe after applying some tow dipped in tar.

The Frog should never be cut away, nor raised by the shoe above pressure with the ground, as it then loses its function of expanding the quarters of the foot, and will also become diseased.

Canker.—Cut the diseased part away; apply each day a fresh liniment of oil of turpentine 1 1/2 oz., sulphuric acid half an oz., mix slowly; tar 3 oz. Pressure is one of the best remedies.

Shoes should nowhere be in contact with the horny sole.

Pole Evil.—Open and apply ointment, hot, of oil of turpentine 1 oz., verdigris half oz., yellow resin 3 oz.; mix. After disease is destroyed, dress as a common abscess.

Staggers produced by too high feeding and little exercise. Bleed largely and give aloes 7 drachms,

Castile soap 2 drachms, water 1 pint: mix at one draught.

Cropping or Docking manifests a want of feeling and a want of taste, which should subject the operator to the loss of a finger by the same useless and dangerous process.

Glanders is so difficult of cure as to require a surgeon, and is so fatal and contagious that he should by no means be allowed to go into the neighbourhood of other horses, nor feed from the same bucket or rack, nor use the same harness. Symptoms are, discharge at the nose, and swelling of glands under the throat. Soon as removed, purify the stall by lime, washing, &c.

Strangles.—Inflammation of under-jaw glands, with cough. Give, once a day, Fever Powder, viz., antimonial powder 5 drachms, camphor 2 drachms. Mix for three doses.

Change from grass to hot stable is injurious.

Chronic Cough.—Blister throat, keep moderately warm, regular exercise, and each day tartarized antimony 1 1-2 dr., aloes 1 1-2 dr., Castile soap 1 1-2 dr. Syrup to form ball.

Fever.—Bleed. Give pint castor oil, keep moderately warm, feed warm bran mash, and administer, once or twice a day, this Fever Powder: camphor 1 dr., antimonial powder 2 1-2 dr. Mix.

Excessive Purging creates inflammation and is highly pernicious. Give opium, half a drachm, twice a day. Rub well, keep warm and perfectly quiet. If necessary, blister, and rub with turpentine.

Jaundice.—Give, daily, opium 1 dr., calomel 1 dr., and syrup to form a ball.

Diabetes.—Give animal food, at first as broth, until he will feed upon flesh, and omit vegetables and all fluids as far as possible.

The Mange is occasioned by low feeding, want of cleanliness, or by contagion. Rub with oil turpentine 2 oz., sulphur vivum 3 oz., lard 5 oz., mixed.

Wind Galls about the fetlock are from hard labour. Cure by blisters and repose.

Saddle Galls.—Apply cold water, sugar of lead, and water or vinegar.

Brandy and Salt, two thirds brandy and one third salt, good for all kinds of galls, wounds, bruises, and inflammatory sores.

COWS.

Currying.—Cattle are well known to thrive much better where this operation is thoroughly performed, and Dr. B. Rush, in a lecture upon the advantages of studying the diseases of domestic animals, states that there is an improvement in the quality of the milk, and an increase of its quantity, which are obtained by currying the cow.

Be assured by experience of the truth of the saying, that "one cow well milked is worth two badly milked."

Curwen, from three acres of grass, cut and fed thirty milk cows with 28 lbs. each day, for 200 days. Their health was excellent, and their milk superior.

Milk clean.—The first drawn milk contains only 5, the second 8, and the fifth 17 per cent. of cream.

Kicking.—If the milker will keep his nails short, not one cow in a hundred will kick.

Sores.—An ointment made of linseed oil and white lead, will cure cracked teats.

Drink.—Those who wish their cows to give large masses of milk in the winter season, should give them warm drink. The extra trouble will be more than repaid in the increased quantity of milk.

In milking, be kind and soothing: the cow will give down her milk more freely.

Cream.—Do not milk so far from the dairy as to let the milk cool before it is put in the creaming dishes.

SHEEP.

Lobelia (or Indian tobacco) has been found good where the symptoms of disease are a drooping, running at the eyes, weakness in the back and loins, and losing the use of their hind legs, &c.

Foul Noses.—Dip a small mop on the end of a stick in tar, then roll it in salt, and hold it in your sheep's mouth.

Tar.—During the season of grazing, give tar, at the rate of a gill a day for every twenty sheep. Sprinkle a little fine salt over it. This promotes their general health.

OXEN.

Being well-mated, oxen are more easily trained; and the more easily to effect this, much self-denial on the part of the driver, much coolness of temper, more training by motion and less by voice, may be highly advantageous to man and beast.

HOGS.

Food.—If pumpkins, roots, apples, or any of them be fed to fattening hogs with corn, the advantage will be salutary. Most of the food for swine should be cooked. Swine fatten much faster on fermented, than on unfermented food. Salt, charcoal, and once in a while sulphur, are excellent for hogs under all circumstances.

Good Medicine.—When your hogs get sick, you know not of what, give them ears of corn, first dipped in tar, and then rolled in sulphur.

A Fact.—The first litter of pigs from a young sow are naturally feeble and difficult to raise, and never perhaps acquire the size and weight that litters of the same sow do afterwards.

BEEES.

Every farmer should keep bees; a few swarms to furnish honey for his own use, if no more. They toil with unremitting industry, asking but a full sweep of the wing, and no monopoly. Every man, in either town or country, can keep bees to advantage. Dr. Smith of Boston has an apiary on his house top, from whence his little winged labourers traverse the air eight or ten miles in search of food. What a delicious banquet they afford, from the rich nectar gathered! They collect honey and bread from most kinds of forest trees, as well as garden flowers; orchards, forests, and trees—all contribute to their wants, and their owner is gratified with a taste of the whole. Sweet mignonette is especially mentioned as easily cultivated by drills in a garden, and is one of the finest and richest flowers in the world, from which the honey-bee can extract its food.

The cobwebs must be kept away from the immediate vicinity of the hive, and all other annoyances removed.

"Never kill a bee." The smoke of the *fungus maximus*, or common puff ball, when dried so as to hold fire, has a stupefying effect on the bees, and renders them as harmless as brimstone does, without any of its deadly effects. By means of this, weak swarms, which would not live through the winter, may be united to strong stocks. It is a fact, borne out by experiment, that a hive thus doubled will not consume more honey in the winter than a stock in its natural state. This was discovered by a Swiss pastor, De Gellior. The additional heat seems to serve instead of additional food, to keep up the vitality of the half-torpid bees. A cold, dry, dark room, is the best winter quarters for bees. They will consume less honey than if left on their summer stands, and will not be weakened by the loss of thousands, which, tempted out by the premature warmth, are caught by the cold winds, fall to the ground and never rise again.

Dryness is essential; and ventilation, or proper airing of the hives in summer, is the most valuable improvement in bee keeping.

POULTRY.

Nearly every family can, with very little trouble, have eggs in plenty during the whole year; and of all the animals domesticated for the use of man, the common dunghill fowl is capable of yielding the greatest possible profit to the owner.

The Hen-House should be warm in winter, well ventilated in summer, whitewashed and kept clean. Roosts of sassafras poles are less infested with lice. Have no ground floor. Supply slacked lime, fine gravel, or ashes, or burnt oyster shells, &c.

Feeding.—They will sing over Indian corn with more animation than any other grain. The hen must have secrecy and mystery about her nest; watch her, and she will forsake her nest, and stop laying.

They eat less, if allowed to help themselves to what they want, than if fed in the usual way; for in the latter case each tries to get as much as it can, and thus burdens itself, but feeding in the former case that they have abundance, they eat but little and that generally in the morning early, and in the evening going to roost.

A farmer may keep an hundred fowls in his barn, may suffer them to trample upon and destroy his mows of wheat and other grain, and still have fewer eggs than the cottager who keeps a single dozen, who provides secret nests, chalk eggs, pounded brick, plenty of Indian corn, a few oats, lime, water and gravel, for them; and who takes care that his hens are not disturbed about their nests. Three chalk eggs in a nest are better than a single nest egg, and large eggs please them.

A single dozen fowls, properly attended, will furnish a family with more than 2,000 eggs in a year, and 100 full-grown chickens for fall and winter stores. The expense of feeding the dozen fowls will not amount to 18 bushels of Indian corn. They may be kept in cities as well as in the country, and will do as well shut up the year round as to run at large, with proper care.

A Fact.—Eggs the nearest to roundness produce females, and those pointed at one end always produce males.

For Fattening.—Boiled Indian, wheat and barley, is better than oats, rye or buckwheat. One-third is gained by boiling.

MISCELLANEOUS HINTS.

Wild Onion may be destroyed by cultivating corn, ploughing and leaving the field in its ploughed state all winter.

Remember.—The great rule in relation to animals holds perfect in its application to vegetables: breed only from the best animals; defects and imperfections have always a tendency to propagate themselves, and are always, in a greater or less degree, transmitted.

Wheat shoots strongest when there is an interval between the time of ploughing and sowing, but *barley* is most vegetative when sown immediately after the plough.

Grease Wheels.—50 parts, by weight, of pulverized black lead, 50 of lard, 50 of soap, and 5 of quick-silver. Rub the lard and mercury first together, then the lead and soap. If well mixed, it is invaluable.

Plants, when drooping, are revived by a few grains of camphor.

Flowers beginning to fade, can be restored by putting the stems in scalding water.

Bacon Hams in summer.—Pack in a barrel, in clean dry ashes or charcoal; head up the barrel and put it where it is dry, and as cool as possible.

Timber cut in the spring and exposed to the weather with the bark on, decays much sooner than that cut in the fall.

In Feeding with corn, 60 lbs. ground goes as far as 100 lbs. in the kernel.

Apples.—Experiments show apples to be equal to potatoes to improve hogs, and decidedly profitable for fattening cattle.

Pears are greatly improved by grafting on the mountain ash.

Rats and other vermin are kept away from grain by a sprinkling of garlic when packing the sheaves.

Wet Land.—Money skillfully expended in drying land by draining or otherwise, will be returned with ample interest.

Grass.—Sweet and nutritious grass gives a richness and flavour to milk, attainable from no other source.

Curing Fodder.—Bundles may be so placed around centre-poles as to form a hollow stack, having a foundation of brush, sticks, &c., admitting a circulation of air that will thoroughly cure fodder in the shade.

Turnips of small size have double the nutritious matter that large ones have.

Ruta Baga is the only root that increases in nutritious qualities as it increases in size.

In transplanting trees, the hole should not be proportioned to the extent of the roots as they are, but to their extent as they may be and should be.

Toads are the very best protection of Cabbages against lice.

Peach Trees are protected from hard winters by covering the roots a foot deep with straw, in January, after the ground has become thoroughly frozen, which keeps the frost in the ground, and so prevents the sap from starting until the Spring is fairly opened.

The Udder of a beef cow, salted, smoked and dried, is rich, delicious eating.

Lard never spoils in warm weather if it is cooked enough in frying out.

Wash your Butter in cold water, work out all the buttermilk, pack it in a stone jar, stop the mouth air tight, and it will keep sweet for ever.

Tomatoes make an excellent preserve.

Sweet or Olive Oil is a certain cure for the Bile of a Rattlesnake. Apply it internally and externally.

To cure Scratches on a Horse.—Wash the legs with warm strong soap suds, and then with beef brine. Two applications will cure the worst case.

A lump of Sal eratus or Pearlash, crowded into the pipe of a Poll Evil or Thistletoe, two or three times, will cure this incurable disease.

Corn Meal should never be ground very fine. It injures the richness of it.

Rice is often over-boiled. It should be boiled but 10 minutes, and in no more water than it will absorb while boiling. Put two cups of rice in three cups of water.

Sulphur is valuable in preserving grapes, plants, &c. from insects.

Old Brine—If sweet and good, and has kept your old pork good, it will keep the new without boiling. If the brine is full of matter which it has received from the old pork, it cannot extract the best juices of the new, and is quite as sweet.

Salt is really necessary to horses, cattle, and sheep, and they should be supplied with it at regular stated intervals throughout all seasons of the year.

Manure, on a wet soil, produces but half its effect: and gypsum, that grand stimulant of dry soils, on a wet one is useless.

Save your Fire Wood.—Mr. Madison, in his Notes of Agriculture, says, "Of all the errors in our rural economy, none perhaps is to be so much regretted, because none so difficult to be repaired, as the excessive and injudicious destruction of fire wood."

Sorrel may be killed out by lime, while ashes has no effect on it.

Shumac or *Sumac*, a poisonous shrub or plant, which grows wild in abundance, and frequently where nothing else will, is used for dyeing in England, at the rate of thirteen thousand tons per annum. It might be made a source of profit to our farmers.

Lime.—A Pennsylvania farmer raised 400 bushels of wheat from a field of land which five years ago produced but thirty bushels. He spread fifteen hundred bushels of lime on said land.

Barley is becoming more an article of diet. It makes the finest of cakes when prepared like buckwheat. Farmers are finding it as poor economy to turn barley into beer to make paupers and criminals for them to support, as to convert apples into cider to create an appetite in their children for stronger drink. Ground, it is a most valuable food for all kinds of stock.

Sunflower yields 140 bushels per acre, and each bushel of seed one gallon of good oil. Cost of expressing, 25 cents per gallon. Its leaves furnish provender, and its seed is capital food for poultry, cattle, and hogs. It is a profitable crop on poor soils, requiring but little labour.

An Emetic may be made in emergency by taking two teaspoonsful of mustard mixed with water.

Rye is most thrifty on soil of a dry, sandy or gravelly texture, if well manured, and winters better the earlier it is sowed. It is the least healthy of all the grains. Sown early for winter a bushel per acre, and in spring a bushel and a half, will generally be sufficient. The earlier harvested, the whiter the flour; later, the grain may be heavier from the thickness of the skin, causing more bran but no increase of flour. Roofs well thatched with rye straw last 20 years.

Corn.—Sprinkling with salt and water will check the Weevil.

Keeping Fruits.—The three best, of eight different modes, fairly tried, are, 1, covering in pure dry sand; 2, in dry fern; 3, in a deal box buried in the earth; in all cases placed in a cool situation.

Orchards of pear or apple trees are more subject to blight and destruction, if open and sloping to the West, than in any other exposure. Either ashes, iron or soap suds, applied to the roots, have cured blight in pear trees.

Caterpillars and other insects are effectually destroyed by a drenching of tobacco juice.

Butter.—Heating the milk in winter, after straining, to 130 degrees, improves the quantity and quality of butter, and reduces the time and labour of churning.

Borer.—Kill this insect's eggs in apple and quince trees by a solution of potash, applied with a brush about the foot of the tree, occasionally, from April to June.

Draining is important, and covered drains are more lasting and valuable than open ditches. Cut drains three or four feet deep, place a row of poles at bottom, then a layer of brush to within ten inches of the top, then a few inches of straw or dry leaves, and cover with earth well rammed down.

Bone Dust.—An English proverb says, "One ton of bone dust saves the importation of ten tons of grain."

Ashes, although leached, form an excellent manure.

Pumpkins may be kept a year, sound and well flavoured, if carefully gathered and hung up in a dry cellar. Or, take out the soft parts, slice, and dry in the sun or oven. Keep dry, and boil; a rich good food.

Ducks, when young, should have but little water, and be fed exclusively on boiled food, potatoes, &c. Hominy for fattening is good.

"Salt is health to a gosling, but death to a chicken," is an old and true saying.

Cider.—Cleanse barrels with lime, then rinse well out. Half a pint mustard seed will preserve it good a long time. Filtering through a hair sieve and racking off improves it.

Roots.—Feeding with roots, especially with sugar-beet, cannot be too highly prized, being rich, juicy, fattening, and economical.

Turnip Fly may be expelled by the use of fish oil, one or two gallons to the acre.

Pork Cured. Soon as cool enough to cut, and before it freezes, pack a clean cask full, with plenty of salt on all sides of each piece. Fill up with water, taking care, by means of a large stone, to keep the pork under the pickle, and covered from flies, in a cellar. Never boil pickle.

Pork Feeding. It is a well ascertained fact that more meat will be made on half the weight of corn, if ground and made into mush instead of being fed whole.

In Smoking Hams, &c., be careful not to have the fire too high, or the smoke-house too tight. It is best done in an upper story to which the smoke is conveyed in tubes, from oak or maple chips in the cellar. In passing this distance, the vapour which smoke usually holds, is deposited, and the hams are perfectly dry and cool during the whole process.

Hollow Horn. Where supposed to exist, feed half peck potatoes twice a week, and treat your cattle kindly in food and shelter.

Timber. To preserve, soak in lime and water, long enough for the lime to penetrate.

Sheep must be fed well, kept dry, have salt often, and pure air, and be grazed in hilly stony pastures.

For packing Plants, use saw-dust.

As a general rule, with but few exceptions, square large fields are more advantageous than small irregular ones, requiring less fence, and being more easily watered, manured, ploughed, and harvested.

SUCCESSFUL FARMING.

The Farmers' Cabinet relates an instance of a farmer in the neighbourhood of Amherst, N. H., who commenced in the world as a day labourer, and who, notwithstanding he has at various times sustained heavy pecuniary losses in the investment of his funds, is now worth at least one hundred thousand dollars.

"This man, when thirty years of age, by the avails of his industry added to a small legacy, was enabled to purchase and pay, in part, for a farm of one hundred and thirty acres of land, one hundred of which was under cultivation, but in a very low state. The farm is altogether upland, with a soil composed of loam, clay, and sand, in the chief of which the latter preponderates, the former being least considerable. When he commenced farming, he adopted a particular system of rotation, to which he has implicitly adhered from that time to the present, which is forty years, and his success is the best comment on the worth of the experiment. His mode was as follows: having divided his farm into eight fields of equal size, as near as possible, three of those fields were sowed with wheat each year, one with rye, one planted with corn, two in clover, and one an open fallow, on which corn had been raised the year previous. One of the two clover fields is kept for mowing, the other for pasture, both of which are ploughed as soon after the harvest as possible, and prepared for wheat in the fall. All the manure which is made on the farm for one year is hauled in the spring on the field intended for open fallow, which is then ploughed, and, after one or two cross ploughings through the summer, is also sowed with wheat in the fall. The field on which the rye is sown is that from which a crop of wheat has been taken the same year, and which had yielded three crops. Corn is planted on the field from which rye had been taken the year previous, the stubbles of which

are ploughed down in the fall. Clover seed is sown early in the spring on two of the wheat fields, those which have been most recently manured. By this method, each field yields three crops of wheat, two of clover, one of rye, and one of corn, every eight years. Each field, in the mean time, has lain an open fallow, and received a heavy dressing of manure, perhaps at an average of fifteen four-horse loads per acre. His crop of wheat is seldom less than fifteen hundred bushels, but often much more. His average rye crop is about four hundred and fifty bushels, and his corn crop annually about five hundred bushels; all which grain, at the present low prices, would amount to more than *two thousand dollars* annually, and at former prices to double that amount, and his farm is withal very highly improved."

ROCKS

Are easily broken in pieces by building a fire on them, and throwing on water while hot.

SMALL FARMS.

In conclusion, we desire to impress on the common-sense reasoning of every man, the paramount importance of having no more land in culture than *can be well* cultivated. By no means attempt to manage more than you can manage well. Be a **FARMER**, not a mere earth-scraper, lazily scratching up sufficient earth to destroy the face of the soil, and throw seed away, or you will always have to scratch hard for a living. But make your farm a source of pride, and it will surely become a source of profit. Make the object to be not to have *many*, but **RICH** acres.

THE SUGAR BEET.

BY JAMES RONALDSON, PHILADELPHIA.

In the feeding cattle, milk cows, and stock of all kinds, every farmer who has tried the Sugar Beet, knows that it is equal to any, and superior to most of the feeds that are used. Its culture is attended with little expense, and in our dry climate is more certain of making a good crop than any other of the roots grown for the purpose of feeding stock.

A gentleman interested in the growing of sugar-cane in Louisiana, states that a crop of Sugar Beets is found to be superior to all other crops as a refresher and renovator of the land after the fourth crop, that is, the fourth year of sugar-cane. If it proves suitable for making sugar from in the cane latitude, the making of sugar will assume an entirely new character; and in Louisiana, the boiling season will commence with the beet, and close with the cane, whereby the same capital that is invested in the works, machinery, &c., connected with the boiling house, will prove a great saving on this portion of the planter's capital.

As yet the process of extracting sugar from beets has not been made sufficiently perfect to obtain the whole saccharine matter as in the case of the sugar-cane, therefore the residue forms excellent food for cattle.

Choice of Ground.—Beet thrives in the soil suited to the potato. In the absence of manure the roots will be small, but where they grow fresh and healthy, it has been found that small plants yield a large proportion of sugar; but this by no means makes up for the want of mass.

Land essentially stiff clay is not suitable for beets, because the seed germinates badly, and the root becomes forked and rises too much above the surface, where it becomes hard and reedy. One of the evils attending forked roots is, that stones, gravel, and earth get enveloped in the interstices, and injure the machine, when the object is to make sugar. Clay soils are improved by deep and frequent ploughing and harrowing; the manures best suited to this kind of ground, are half-rotted straw, fresh stable dung, leaves, &c.

Preparation of the Ground.—Here, as in all other departments of the farming business, much of the success depends on the skill and judgment of the farmer. In many cases three ploughings will be necessary, and one of these ploughings should be before winter, that the turned-up soil may be mellowed by the frost; the last ploughing has to be in the spring immediately before planting the seed; two ploughings in this country will be found sufficient; in all cases it should be well harrowed, and rolling will be an improvement that amply repays the expense. Deep ploughing is generally useful, but the farmer has to consider the nature of the substrata. It would be improper to turn up

much of the poor clay or gravel bottom, and where the substrata is an open sand, deep ploughing is not required. Manure in which the process of fermentation has not advanced far, will answer best for beets, nevertheless all kinds are useful; but the half-rotten best divides the soil and suffers the roots freely to expand.

Of Sowing in Beds.—By this method the whole of the seed is sown on a small portion of land compared with what it is intended to occupy; these plants will be fit to pull up and plant out where they are finally to remain, in a month or six weeks from the time of sowing; this planting is performed by means of a dibble with which holes are made in the ground, always a little deeper than the length of the plant that is to be put into them, and with this dibble the earth must be carefully pressed close to the root. This mode of sowing should be thought of only where seed is scarce, the quantity to be sown not great, and labour easily procured.

Broad Cast.—This manner is the simplest. Six pounds of seed will be required where two and a half or three would have been enough when planted in drills by the hand, and the produce is never as great as by the following method:

Rows or Drills.—The little furrows into which the seeds are to be dropped are made by a harrow, having the teeth at the distance one from another that the rows of beets are intended to be from each other, and the seed is dropped two or three into the drills at the distance of twelve to eighteen inches apart from each other. After the planting is finished, the seeds are covered by having a light harrow with plenty of teeth in it drawn over the ground. In this way there is a great saving of seed and the plants are regularly spaced. Four boys will plant an acre in a day. By using a drill drawn by a horse, the labour is very much abridged and the work will be expedited. This machine is very important to those who plant large fields. In fixing the distance that is to be between the rows, reference should be had to the kind of horse-hoe that is to be used in keeping the crops free from weeds. When the plants are far from each other the roots will grow to a large size, and the contrary will result from planting them close. The seed should be planted at the depth of from one to two inches.

Time of Sowing.—This depends on the position of the place and the nature of the soil; as a general rule, the earlier the better. Provided the land is dry and in proper order, early sowing is particularly important when the object is to make sugar, because the roots ar-

rive sooner at maturity and allow the process of crushing to commence early.

Of Hoeing.—Few plants suffer more than the beet from neglect, and the baneful influence of weeds in the first stages of its vegetation. The ground therefore has to be kept free of weeds, and it should be kept mellow during the plant's development. Beets require one or two hand thinnings, and as many hand hoeings. The first of the hoeings should be about when four or five of the leaves have put out, the second in from three to five weeks afterwards. All the plants save one must be pulled up at the time of hoeing; if not properly thinned, there will be a cluster of leaves, but very small roots; where there are blanks, they should be filled up with those pulled up from where there are too many. After the rows have been carefully freed from weeds and properly thinned, the horse-hoe, cultivator, or drill harrow can be advantageously run between the rows. After each horse-hoeing, remove the earth thrown on by the harrow, &c. If any of the beets shoot out into the seed stalk, cut off these stalks, because this growth would be at the expense of the root.

Harvesting.—The evidences of the plant being ripe are a falling down of the leaves, and those of a bright green, turning yellow and brown. The influence of drought may bring on these appearances; the observing farmer will understand when this change is caused by heat, or want of moisture; indeed he has to attend to the weather, and the appearance of the approach of winter, that he may take advantage of all the growing season, and at the same time not be too late in harvesting, and thereby expose the crop to be injured by frost. The roots should be pulled by hand, or assisted by the spade when necessary. Shake the earth off them, and be careful not to strike one against another or in any way bruise them: bruising disposes them to rot. Cut off the tops, being careful not to cut the beet. The leaves being cut off lessens the disposition of the root to vegetate, and it prepares them to be housed. The beets should lay on the ground until they are dry before they are housed.

Preservation.—The roots must not be left long on the ground exposed to the air, heat and moisture; much heat or cold are both found detrimental, as a heat of fifty-six to sixty degrees Fahrenheit, in damp weather, will produce a fermentation sufficient to reduce the quantity of saccharine matter; and on the other hand, beets freeze very readily, so that only a few degrees below thirty-two will dispose them to rot.

The best aired cellar is not better for securing the beet than a judiciously made pit. It is most prudent to make them large, because if a part of the contents of a pit begins to spoil, the disease will spread through the whole mass. They may be made from four to five feet wide, and eight, ten, or twelve long. One to two feet is deep enough; this hole is to be filled with beets, and piled up until they form a ridge, and the whole is to be covered with the earth dug from the pit; a drain should be cut round the heap, to carry off all water, it being of importance that the beet be kept dry, and for this reason, ground naturally dry should be selected for the pits: perhaps in our severe climate it may be ne-

cessary to spread a little straw or corn-stalks on the outside of the heaps, to keep out the frost; if put inside, it might rot and spoil the beets; and it may be useful to open the pits from time to time to air and keep them fresh, and if any are observed to spoil, they should be carefully taken out. The preserving of beets is the most difficult of all the branches connected with them.

Growing of the Seed.—It is only in the second year that it produces seed. The proper time for choosing the roots from which the seed is to be produced next year is when taking up the crop; these should be healthy, somewhat above the medium size in length and thickness; well formed and no ways forked, and of a fine light colour (if for sugar, perfectly white); they should be kept through winter in sand or dry earth, and placed in a temperate barn or cellar equally guarded from the influence of heat and cold. They should be planted out in March, or so soon as the land is in good order, and at the distance of two or three feet apart: the branches being liable to split off, and break down, have to be supported by sticks or frames. When the seed is ripe, which will generally be in September, the stalks are to be cut off and tied into bundles to dry, and then the seed is beaten off or removed from the stems by hand. The small seeds towards the outer end of the branches do not ripen well. The next process is to expose the seed to the sun, and then it is put into sacks and kept in a dry place, where mice and vermin shall not have access to it. The average yield of plants in France is from four to six ounces of good seed.

General Remarks.—The Beet is found, under some circumstances, to degenerate, the seed of the white plant producing yellow and red roots: this tendency may be checked by changing the seed from clay to sandy, and from sandy to clay soils. The seed, if carefully preserved from moisture, insects, and vermin, will keep for several years; but after four years, it will not be prudent to sow it. When the object is to make sugar, care should be taken to have seed that will produce white roots; and early sowing will afford the opportunity of commencing the crushing and boiling at an early period. The early bruising produce the largest proportion of sugar.

When the Beet is employed in feeding cattle, one of the effects will be, to produce more and richer manure, and this will place in the farmer's power the entire command of his farm; he can do with it whatever he pleases. Every encouragement is held out for the culture of beet. It being a green crop, draws much of its nourishment from the atmosphere; and in place of exhausting the land, leaves it in fine order, for any crop the farmer may choose to put on it. Beets in no way interfere with the cultivation of wheat, clover, barley, Indian corn, potatoes, turnips, &c. With the aid of a few beets, the profitable effects of that most useful grain, Indian corn, will be greatly increased in feeding cattle. Calves fed with beets or roots in their first winter, will generally be as good animals at the end of two years, as those that have been fed the first winter on dry food and corn, will be at the end of three years.

VEGETABLES.

Artichoke.—Sow early in the Spring, in rows three inches apart, or plant suckers.

Asparagus.—Sow in April, in good rich soil.

BEANS. *English Dwarfs.*—Plant as early in the Spring as the ground will work.

Kidney Dwarfs.—Plant from end of April to about 20th August.

Pole or Running.—Plant beginning of May, and at intervals through the season.

Beets.—Sow in drills, from early in the Spring till the middle of Summer. Leave the plants 6 to 8 inches apart in the drills.

Borecole is an excellent green. Sow in Fall, either broadcast or in drills, as for Winter Spinach.

Brussels Sprouts are cultivated for the small heads which are attached to the stem. Sow in the middle of Spring, and treat as Winter Cabbage.

Brocoli produces heads like Cauliflower. Sow in seed bed about the middle of Spring. Transplant in

rich ground when 8 or 12 inches high, and treat as Winter Cabbage.

Cabbage.—For early cabbage, sow in Autumn, in seed beds. Protect during Winter; transplant early in the Spring. For late cabbage, sow in seed bed, middle of Spring. Transplant early in Summer.

Cardoon is much used for salads, soups, and stews. Treated much like Celery.

Cauliflower.—Sow, for early, in seed beds, in Autumn; protect from frost, in cold frames, and transplant in rich ground after frost ceases. For late, manage as Broccoli.

Carrots should be sown early in the Spring, in deep-dug and well-manured ground, in drills twelve or eighteen inches apart.

Celery should be sown early in the Spring, in light rich moist soil. Transplant in trenches, highly manured, when about 6 inches high. Blanch by earthing up as they advance in growth.

Chervil.—A small salad. Sow early in the Spring, and after heat of Summer.

Cress.—Used as a salad. Sow very thick, in shallow drills, at intervals through the season.

Corn Salad.—Used as a salad during the Winter and Spring. Sow thick, in drills, about 1st of September, and cover with straw on the approach of cold.

Cucumbers should be planted first week in May, in hills 4 feet apart; prepare the ground by incorporating a shovelfull of rotten dung in each hill.

Endive.—Sow last of Spring to middle of Summer, in shallow drills.

Egg-Plant.—Sow in hot-beds early in the Spring; transplant in rich warm ground late in the Spring, about 30 inches apart. Egg-plant seed will not vegetate freely without a substantial heat.

Lettuce should be sown in seed-bed, in the middle of September; protect the plants through the Winter, and early in the Spring transplant in rich ground; or sow in hot-beds in March, and at intervals throughout the season.

Melon.—Plant in hills, in light sandy earth, about the first week in May.

Mushroom Spawn should be planted in hot-beds of dung, covered with earth.

Mustard.—Sown like Cress, and used for a salad.

Nasturtium.—Sow in May. The flowers and young leaves are used as a salad; the seed-pods, with foot-

stalk, are gathered whilst green, and pickled as a substitute for capers.

Okra, or Gombo, is one of the best of vegetables. Plant in May. The seed should be sown thick, as it is liable to rot in the ground. Very rich ground is required.

Onions should be sown in drills, early in the Spring, in rich ground, thin, to stand 2 or 3 inches apart.

Parsley should be sown early in the Spring. Soak in warm water before sowing.

Parsnip.—Sow in drills 18 inches apart, in good and deep-dug ground, early in the Spring.

Peas.—The best soil for Peas is a light loam. The early sorts require rich ground. Sow in drills as early in the Spring as the ground will work.

Pepper.—Sow late in Spring, in drills, on a warm border; or in a frame or hot-bed, in March; set out plants 18 inches apart.

Pumpkin.—The Mammoth Pumpkin has been grown to the enormous weight of 225 pounds. Plant early in May, in rich soil, in hills, 8 to 10 feet apart each way.

Radish.—The early kinds should be sown as soon as the ground can be worked, in a sheltered situation.

Rhubarb should be sown in Autumn or early in the Spring: when in the latter, transplant in the ensuing Spring to desired situation. The stems are used for tarts, and are fit for use before green fruit can be obtained, being a very desirable substitute.

Salsify, or Vegetable Oyster should be sown during April. The roots boiled, made into cakes, with paste, and fried like oysters, much resemble them.

Spinach should be sown as soon as the ground can be worked. The soil cannot be too rich for Spinach.

Squash.—Cultivate same as Cucumber.

Tomato.—Sow in hills 3 feet apart, on a warm border, early in the Spring. As the plants advance in growth, give them support.

Turnip.—For summer use sow early in the Spring. For main crop sow close of summer. The Ruta Baga requires more time to mature, and should be sown at mid-summer.

Aromatic and Sweet Herbs.—Anise, Brazil (sweet), Caraway, Coriander, *Fennel, *Lavender, Marygold Pot, Marjorum (sweet), *Sage, Summer Savory, *Winter Savory, *Thyme, *Mint, *Rosemary, Dill.

Those marked with a * are perennial, and when once obtained may be preserved for years. The others are annuals.

HORTICULTURE.

BY HENRY A. DREER.

FLOWERS.

General Directions for their Cultivation.

The Flower Garden has always been the object of admiration: its refinement and delicacy have never been questioned, while its proper cultivation and attention are universally considered as evidences of taste and intellect.

Soil.—The first requisite to ensure the healthy growth of flowers, is soil. That most suited to the cultivation of garden flowers, is a rich mellow loam, which should be well manured and pulverized late in the fall, or as early as possible in the spring. When ground is of a hard and clayey nature, the addition of sand will tend to render it less adhesive, and thus enable your tender varieties to strike their roots deep in the earth when they might otherwise perish with drought. The garden should have a regular supply of manure every fall.

Annual seeds may be sown from the 1st April to the 1st June, with variations of success. Those sown earliest, flower sooner and more profusely. Sow either in small beds or in drills from one-fourth to one inch in depth, according to the size of the seed. In a month to six weeks they will be ready to transplant. Be careful to do this during cloudy and rainy weather. Remove your plants carefully; set the larger flowering kinds in the rear, the smaller in front. Above all things, be careful not to crowd them, as one healthy plant is more beautiful in a garden than fifty sickly and attenuated. Tie your taller-growing kinds to painted rods: this gives an air of neatness, indispensable in a garden. If the weather, at the time of transplanting, is dry and warm, water them well for a week, and keep them entirely shaded from the sun. Do not set all out at once, but from time to time, lest a hot season should prematurely arrive. Many tender annuals, that do not vegetate freely in the open ground, and which, after vegetation, a slight chill might destroy, may be brought forward in the following manner:

Cultivators desirous of obtaining an early bloom, may commence by sowing their seed early in March, in pots or boxes of earth in the house, giving them as much sun as possible during the warmth of the day, and protecting them from the influence of a chill during night. This operation must, however, be performed with great care, to scarcely cover the more delicate kinds, while the stronger-growing may be sown a quarter of an inch in depth. A very delicate watering-pot, which suffers the water to fall like a shower of dew over the earth without washing away the most delicate seed, should be used. Give only a sufficient quantity of water; the greatest fault with the inexperienced is their propensity to drown every plant, which is equally injurious with depriving the plants entirely of sustenance. Preserve each kind distinctly labelled.

However, the most proper method, and that most generally practised by families having large gardens, is to "throw up" a small hot-bed, in which the pots containing seed may be plunged to their rims, or sown in shallow drills on earth previously placed over the manure, and should then be labelled to prevent mistake. The Cyprus Vine, Scarlet Morning Glory, and other species of the Convolvaceæ, should be soaked a few hours in warm water before being placed in the ground. They will then vegetate much earlier and more regularly, and will blossom sooner. Many varieties will vegetate much sooner by covering them with a hand-glass, which should be taken off shortly after their appearance above ground, lest they should be rendered weak and sickly by confinement.

Cover the bed up carefully at night, for fear of sudden cold chilling the plants. Give them air by raising the sash on every fine day: this will render them more hardy, and capable of enduring transplanting with less danger.

Lupinus delight in a half-shady spot, and should never be transplanted: the seed may be sown early in March, in the open ground, and, when in city culture, kept moist after vegetation. Leaf or peat soil to mix will prove advantageous.

Hardy perennial and biennial seeds may be sown about the same time as the annuals. These do not blossom the first year; they may therefore be thinned out or removed from the beds in which they have been first planted: when their roots acquire sufficient strength, set out in the places they are to occupy for the succeeding year. They must be kept free from weeds, and the ground occasionally loosened to facilitate their growth. Biennials are generally raised from seed sown every year. Many varieties of hardy annuals flower much larger and finer in the spring, if sown the preceding summer or fall, so as to vegetate previous to frost. Among these, the Dwarf Rocket Larkspur, Branching Larkspur, Strawberry Spinach, Evening Primrose, Coreopsis Tinctoria, Sweet Williams, Pinks, all kinds of Poppies and Gillias.

There are many kinds that do not endure the frost, but which vegetate much earlier by the seeds passing the winter in the earth. Among these, the Marvel of Peru, Double Balsamine or Lady's Slipper, Cypress Vine, Euphorbias, Sweet Peas, Convolvulus, &c., stand pre-eminent. These, however, answer nearly as well by planting in March, April, and May; and indeed, we have seen seeds of all the varieties, sown in June, flowering beautifully when the others were nearly ended. As soon as a flower begins to fade, pinch it off, and you will have several more equally as fine, to take its place, besides always having your plant neat. The strength given by the plant, to ripen seed, would then be thrown into the production of fresh flower buds.

Biennials are such as are of two years' duration; being sown one year, they flower, seed or fruit the next, and soon after decay. Sow the seeds during April, either in spots where they are to remain, or in beds by themselves, distinctly marked; to be transplanted to desired situations early in the Fall. The following are among the most free-blooming and desirable sorts: Rose Campion, Holyhock, Snap Dragon,

Canterbury Bells, Wall Flower, Foxglove, Pinks, Dwarf Evening Primrose, and their varieties.

Perennial herbaceous plants are those which die down to the root yearly; the roots of which remain many years. There is no class of plants more deserving general culture in the flower garden than perennials; for when once introduced they require but trifling attention: their increase is also of the most encouraging nature, being, in most varieties, effected by simply dividing or parting the roots in the autumn or spring. Herbaceous plants may be divided into three classes, viz. — Bulbous, as the Tulip, Hyacinth, and most Lilies; Tuberous, as the Dahlia and Pæony; and Fibrous, as the Phlox and Perennial Aster. These may again be divided into hardy and tender. Among the bulbs, Tulips and Hyacinths are hardy; the Jacobean Lily, Tiger Flower (Tigridia), and Gladiolus, are tender. In tuberous roots, the Pæony is hardy and the Dahlia tender; and in fibrous, most kinds are hardy, although in many cases they are killed by the winter and by wet saturating their crowns, on which account it is necessary they should be partially covered in winter to protect them from being injured in this manner.

VINES.

Prune hardy kinds in the Spring, by cutting off all dead or superfluous branches, regulating the remainder at an equal distance apart, when they are nailed with shreds of woollen or leather, or tied up neatly. In summer, prune so that the branches may not be too thickly crowded.

Propagate by taking off joints where they have rooted, and planting in the same manner and soil as the parent, in September. Cover the roots with fine earth, and keep moist. Some varieties, as the Honeysuckle and Clematis, are readily propagated by layers and cuttings. (See Plants.)

PLANTS.

Roses should be pruned in the Spring: if allowed to grow straggling they neither thrive nor flower well. The rose always flowers from the young wood, and by being well trimmed more are thrown out. The rose is easily propagated in a deep rich soil. The *Moss Rose* will thrive on a clay bottom.

Althea, or Rose of Sharon, Snowballs, Honeysuckles, and most kinds of soft-wooded plants, may be propagated in the Fall or Spring, by sticking cuttings one foot long, half-way down, ten inches apart, in moist shady ground, well dug and pulverized, with a northern aspect. Press the ground hard round the cutting. To propagate by layers, bend the plant down, making an incision to the under part of the shoot or joint about half an inch; press perpendicularly two or three inches deep, and secure it in the ground, which must be well prepared.

Inoculate by taking well-ripened buds, say in July or August; make an incision in the rind, taking care not to cut through the albumen nor into the wood; cut half an inch below and half an inch above the bud, with about half the wood and bark; press the rind gently back and insert the bud, carefully closing all around and binding with bars or other strings. The plants must be perfectly healthy.

Cold, late in the season, must be guarded against; the tender plants removed to their winter quarters, and those that remain out through the winter. About the middle of November, protect all herbaceous plants by covering them on their crowns and roots with long manure and leaves, tying the branches up neatly, and covering with straw so as to turn off the rain and frost.

Insects may be removed by a strong decoction of tobacco juice, or one made of soft soap, sulphur, and tobacco: sponge or bathe over three or four times. Keep the ground, fences, &c., clean about the flowers, by painting, whitewashing, &c.

In rooms, plants should enjoy as much of the light and sun from the window as possible, be often turned, giving them a supply of fresh air in fine, soft weather; divest them of all dead leaves, and water them as nature indicates by the earth drying in the pots. Too much water sours and rots, too little dries up the plant, and breeds insects, &c. Plants in a growing state require more water.

Seeds should be saved from the plants in the healthiest state, and those first ripe are the best. Clean the seeds, and preserve only those that are full and plump, throwing out those of a light quality.

Leaves are the principal organs of respiration, synonymous with the lungs of animals. Dead or decaying leaves are apt to breed insects.

Plants of all kinds should be so situated that the sun and air may have free access to any part of the leaves, fruit, and all parts as far as possible.

The *Dahlia* thrives best in a deep, rich, loamy soil, with the full benefit of sun and air. In winter, the roots should be cleared of decaying parts, dead stalks or tubers, and kept in a temperature a few degrees above freezing. For late flowers, plant late. Sow seed in May, in open grounds; but in a pot of light, rich, sandy soil, as early as first April, and transplant about middle of May. Divide the roots and plant in March as soon as the eyes begin to push out, in pots or green-house, and transplant when the weather is settled warm.

FRUIT TREES.

Fruits, in a ripe and perfect state, are beneficial to health, if not eaten to excess.

Stunted trees never become vigorous, nor when too long crowded in nurseries.

In *Grafting*, 25 well placed are better than 100 grafts placed at random, and ten placed injudiciously will change the whole top of a tree in a few years, when 200 grafts may be so scattered as not materially to change the top of the tree or its fruit. Graft only on such as are sound and vigorous.

Haggling off limbs and branches and leaving stumps on the trees, which rot off and let the water into the trunk, soon destroys the tree; therefore always cut or saw off smooth, when the wound will heal and the bark grow over.

Sound vigorous trees, and no other, should be set out, as they take no more trouble or space than the worthless ones.

Budding should only be done with fresh buds, on very small stocks of vigorous growth. Begin after sap starts, until 1st June. Later will do. Make incision like a T; raise the corners and insert the bud with as little of the wood as possible, and baidage, not too tight, for three weeks.

Scions may be cut in February or March, before or at the time the buds begin to swell; or take grafts size of a pipe-stem, from bearing branches, not from side shoots nor the rank growth of the top. Put in earth one third their length, keep from frost, and occasionally sprinkle to prevent shrivelling, but not so wet as to sprout them.

Composition.—Rosin 8 oz., beeswax 3 oz.; melt up with lard, and work it like shoemakers' wax: for wounds made in pruning or grafting.

Split the stock, drive in a wedge 6 or 8 inches long, open the split so as to admit the graft freely, sharpen end of graft and insert, matching the wood of graft and wood of the stock; remove the wedge carefully, and cover smooth over with composition, tight, to exclude air, and the sap will force its way to the graft.

Seed.—Select from healthy trees, sound, ripe and fair fruit, and place in sand, in a cellar or other cool, damp place, until time to plant. If kept too dry, they seldom vegetate. Let the soil be good, well worked, not too wet; cover up and press the ground moderately over. Plant in Fall, before the ground is frozen, or in Spring soon as the ground can be worked.

Soil.—Low, wet or marshy ground is not suitable. Soil appropriate for crops of grain is also adapted to the cultivation of fruit trees, shrubs or vines. Occasional digging, mellowing the ground, keeping down underbrush and weeds, and manuring, are beneficial.

Cleanliness is essential. Destroy all caterpillars, noxious worms and insects, and prune off all affected parts. Scrape off rough ragged bark and moss, and wash well with soap suds or cover with a coat of lime-wash. Remove all suckers from the roots, side branches and excrescences.

Grubs, which occasion disease, may be prevented by coating the roots and lower trunk, about July 1, with tar, train oil, or whitewash, and sprinkling a little lime, ashes, or soap suds, on the ground around the tree. When seriously affected, dig the earth from the roots near the surface, and search thoroughly in the bark for the grub; cleanse off the gum, &c., wash with ley or soap suds, or rub dry ashes over them, and close up with good fresh earth. Doing this as occasion requires, will ensure health and vigour.

A MANUAL FOR PRODUCING SILK,

Containing Directions for growing the Mulberry Tree, managing the Eggs, feeding the Worms, securing the Cocoons, and reeling the Silk; comprising the whole process of Silk Making. Compiled from authentic sources, by the Secretary of the "National Association for Promoting the Silk Culture in the United States." Philadelphia, January, 1840.

Planting.—In the Middle States, plant the morus multicaulis from the 15th of April to the 15th of May—a little later or earlier, according to the season. The ground to be made fine; furrows three or four feet apart; distance in the furrow about the same. Some plant one, and others one foot and a half apart. The more distant, the more the tree will branch; but the increase of surface to cultivate, increases the labour. Plant the layers or branches entire, or cut them into two bud cuttings, and bury them as you would corn, but not too deep. Be careful the first weeding. Hot, unfermented manure, is bad. This part of the business requires about the same skill and management as

corn, observing a dry, sandy loam: sandy, light gravelly, or stony soils, produce the sweetest leaf and the finest silk. An acre will hold 14 500 trees, the rows three feet wide, and trees one foot apart in the row; or it will contain, if three feet each way, 4840 trees.

Preserving Eggs.—Rev. Mr. M'Lean says he folded his eggs in a small tea-chest, lined with lead, and covered with flannel. This box was placed in one a size larger, and the space between filled with charcoal, covered with a loose board. Place in an ice-house or cool cellar, where the heat will not rise above 45 degrees. Dennis says, put eggs in a glass jar, covered, and set in the ground two-thirds of its height in a cool cellar. Roberts says, use tin box or glass, not stopped tight, and keep in a dry, cool cellar, or any other cool place where water will not freeze.

Some experienced Silk-growers think the retarding process is unnatural and improper, and that hatching may be regulated to suit, at the same time, the requirements of nature and the supply of food. (See Journal of Am. Silk Society. By G. B. Smith, Esq., Baltimore.)

The Cocoonery.—Cool, airy situations, are best, guarding as far as possible against extremes of sudden heat or cold, dampness, or too great dryness. Cobb, Smith, Terhoven, and others, agree in three tiers of pine boards fixed on upright posts, four feet wide, and two and a half feet above one another, with room to pass all around the frame so as easily to reach any part of it.

The Hatching.—Hatch the eggs in a pasteboard box, or on sheets of paper, a table, or shelf. An ounce will give about 30,000 worms, and upwards. Those that appear red when hatched are worthless, and should be thrown away. Give the worms young leaves, to which they will adhere; then raise the leaf, and thus convey them to their proper places. Keep off rats, mice, roaches, and spiders, and especially ants, which guard against by smearing the upright posts, ends, &c., with tar or molasses, or set the ends in a cheap pan, which fill with water. Hatch when your leaves are sufficiently forward to insure a supply.

The Feeding.—Give the young worms as many cut leaves as they will eat, and no more, feeding eight or ten times a day, and as late at night as you can. Neither stint the worms nor waste the leaves. The leaves should be fresh, clean, and not wet. (Since this Manual was compiled, an important invention has been patented, by Mr. Edmund Morris, Burlington, N. J., which in its simple, rapid and economical operation, not only promises to supersede all other modes of feeding, but to effect a revolution in the business itself, forming a new era in the history of Silk Culture.) Mr. McLean fed his worms without hurdles, removing the litter every third day. Keep the worms quiet, well ventilated, and do not handle or kill them by too much care. Air-slacked lime sprinkled over the shelves, and lightly over the worms themselves, once in two or three days, during the latter part of the feeding, is found highly advantageous. Some have produced a pound of silk from only 50 or 60 pounds of leaves, but 150 pounds is a fair and ample allowance.

The Winding.—Straw tied in small bundles and set on the shelves will do, but green oak bushes seem more natural to them, which they like to conceal themselves among.

Preserving Cocoons.—Gather the cocoons from the seventh to the tenth day, and spread them to dry. Select those intended for seed, strip off the floss, spread them out thin, and in two or three days the moths eat out. Each female lays about 450 eggs, on muslin or paper hung up. The moth in your silk cocoons, immediately kill, either by exposing to a hot sun under glasses, or by baking in an oven not too hot, or suffocate the moth by burning charcoal in a close room; in each case omitting the operation as soon as the worm is dead, which ascertain by opening a cocoon. Generally from a half to one or two hours will answer.

Reeling.—The Piedmontese Reel is the best, and is sold for about 15 dollars. For the double operation of reeling and twisting, Brooks' machine has received the highest commendation—price 40 dollars. To transport cocoons, pack them in dry boxes or barrels, shaking them down, but be careful not to mash or indent them. In measuring, the bushel is heaped if the floss is on, or level with it off.

Those who prefer reeling themselves, may readily do so by observing the following

Directions.—Before the reeling is commenced, the cocoons must be stripped of their floss, and sorted into separate parcels, according to quality. The fine cocoons are strong, hard, and of a fine close grain; the demi-fine are larger, and of a more loose open grain; the double cocoons are those formed by two worms, the fibres cross each other, and renders them difficult to reel; the soft, thin, and coarse cannot be reeled.

Have a large basin of soft water, and keep at a proper heat by charcoal, or any other convenient method. Cocoons of the best quality will require a greater degree of heat than those of a loose and more open texture. Cocoons also require less heat, and reel better, when

done before the chrysalides are killed and the cocoons become dried. The heat of the water may be raised to near the boiling point, when a handful or two of cocoons may be thrown into the basin, which must be gently pressed under the water for a few minutes, with a little brush made of broom corn. The heat of the water will soon soften the gum of the silk, and thereby loosen the ends of the filaments; you then stir the cocoons as gently as possible with the brush, until some of the filaments adhere to it; they are then separated from the brush, which is laid aside, and the filaments raised up and the cocoons gently combed down between the fingers, as they are raised out of the water; this is continued, until the floss and false ends are all drawn off, and the fine silk begins to appear, the fibres are then broken off and laid over the edge of the basin; the floss is then cleared from the brush and laid aside as refuse silk, and the operation continued until a sufficient number of fibres are thus collected to make a thread of the size required; you then unite the fibres, and passing the thread through the eyes or guides, attach it to one of the arms of the reel. When two skeins are intended to be reeled, another thread is prepared in like manner, and passed through other guide wires and attached to the reel. The threads being fastened to the reel, it is turned with a steady motion, until the threads run freely and easily, for it will happen that some of the ends taken to compose the thread will prove false, and will require to be again added anew to keep up the number designed for the thread. It is necessary to put in more cocoons than is intended to continue. While the reel is turning, the reeler must continually be gathering fresh ends to add to the thread as they may be required, because the internal fibres are much finer than those composing the external layers. In adding fresh ends, the reeler must attach them to the thread that is reeling, by gently rolling them between the thumb and finger. A handful of cocoons must occasionally be thrown into the basin, and wholly immersed in the water, to be ready as wanted, to keep up the thread of the size required; care, however, should be taken not to add cocoons faster than is necessary for this purpose, for by being too long soaked in the hot water, they will wind off in burrs. As fast as the silk is reeled off, the chrysalis should be taken out of the basin. Have your fingers smooth.

When the water becomes discoloured it should always be changed, say two or three times daily.

When the cocoons are first put into the water, if the silk comes off in bunches upon the brush, it is a sign the water is too hot; or if in reeling it runs off in burrs, it is too hot; when the ends cannot be caught, or when caught, do not run freely, the water is too cold. A pail of cold water should always be at hand, to be added to the basin as occasion may require. When the cocoons give their threads freely, the reel may be turned with a quicker motion, for the quicker the motion the better the silk winds off.

Intrinsic value of Trees.—A good tree will yield from three to five cents worth of silk, more or less, according to the skill and care in its management. The capital which will yield this percentage is perhaps the only correct criterion by which to fix the value of the article. In Italy, each full grown mulberry tree pays the government an annual tax of sixteen cents. Let the early friends of the silk cause persevere in their efforts to introduce this important branch of national industry and wealth into the country.

THE SILK CULTURE.

The millions of dollars annually exported in specie to pay for silk—the superiority of the silk grown in the United States, and the ease with which, by proper management, it is produced—the adaptation of our soil and climate to its culture—the highly favourable reports made by committees in Congress, and in several State legislatures—the fact that the actual produce of silk in 1840 exceeded twenty-five thousand pounds—the recent

American improvements by which the cost of feeding is so greatly reduced, and the probability of a duty being laid on foreign silk—the fact that a farmer may raise a few pounds of silk without neglecting his other crops or any additional expense, and that were each farmer to do so, the balance of trade would be turned so largely in our favour, and a stop put to the incessant DRAIN of SPECIE, are among the private and public reasons that should dispose all to give the silk culture at least a fair trial.

Governor Seward, of New York, in his recent message, presents the most cogent reasons for the advancement of the Silk culture, and the important fact, that two small districts in Italy, possessing less natural advantages than that State, export silks annually to the amount of twenty-five millions of dollars.

The instruction condensed in the foregoing Manual, is believed to be sufficient for any intelligent mind.

Further information will be abundantly supplied in the monthly Journal on Silk, by G. B. Smith, Baltimore, Md., or by E. Morris, Burlington, N. J.

DUTY ON SILK.

In 1839 the imports of Silk amounted to 22,838,028 dollars; of which nearly 22,000,000 dollars was free of duty. Had a fair duty been imposed on this Silk, the impoverished treasury of the country would have gained 5,000,000 dollars, and the country itself would have been benefited many million dollars more, in aiding the home production of the article. It may well be said, that in imposing duties on all our produce, other countries evince a determination to protect their own industry, to encourage their own citizens, in short, to take care of themselves, leaving us to argue about the doctrine of free trade, which is *free* only upon one side, and whose only tendency, so far, has been to drain our country of its precious metals.

BIRDS.

DIRECTIONS FOR FEEDING AND GENERAL MANAGEMENT.

Canaries become delicate and feeble from improper treatment. Their docility, beautiful plumage, and sweetness of notes, render them general favourites. When young, feed on a paste made by bruising rape seed, blowing the chaff away, mixed with pieces of bread powdered. Give a tea-spoonful with a little hard egg and a few drops of water, when turning sour, mix fresh. Add as they grow older, scalded rape seed without bruising, chopped almond and chickweed, in hot weather twice a day. If sick, give milk of hemp seed, made by bruising clean seed and straining it through linen into water, taking the water glass away from the sick. As they advance in age, give rape and canary, and occasionally bruised hemp seed, taking the soft food away by degrees. Cuttle-fish bone is preferable to loaf sugar. Cakes, apples, berries, bread soaked, the water squeezed out and milk added, are good, and cabbage occasionally, when in season, is excellent.

Perches should be round and strong without crevices or shoulders for insects to breed or harbour, and every corner of the cage should be brushed out and kept thoroughly clean.

The Claws are sometimes so long as to occasion accidents by catching in the wires, in which case trim them.

Mortar placed in the cage facilitates the production of eggs.

Teach singing by separating the bird from the others, so that he may hear no singing, cover his cage for a few days with a thin cloth, then play your flageolet or bird organ several times each day, without harshness. At the end of fifteen days, change the thin cloth for a thick green or red serge, and keep covered till perfect in the air you wish to teach. Feed once a day and night. It is better to teach one good tune well than several imperfectly. The bird will copy all imperfections.

Bad or dull singers are improved by hearing the more spirited and perfect.

Surfeit indicated by swelling of lower part of body, and occasioned by too much chickweed, salad, or soft food. Put alum in the water for three or four days, or put a rusty nail in the water, or common salt. Put the bird, if bad, in lukewarm milk a few minutes, then wash with water, wipe and dry gently.

Sick Birds may have boiled bread and milk with canary seed boiled in it; lettuce seed, and when moulting, or renewing its feathers, indicated by drooping, putting its head under its wing, dropping small feathers, give nourishing food, as hemp seed, sponge, biscuit, &c. keep warm and quiet, and keep much in the sun. A cold air or draft is injurious. Put in the water a little refined liquorice.

Sky Larks.—Feed on seeds, but rarely on insects. Give salad leaves, gravel with a bit of green sod.

Red Bird.—Feed on seeds of all kinds, whortleberries, cherries and other fruits, insects, &c.

American Yellow Bird.—Beautiful plumage and fine song. They are hardy, and the cage should be often hung out. Give plenty of water, gravel, rich oily seeds, with occasional sunflower and lettuce seeds; leaves of beet, salad, apples, and other fruits.

Gold Finch.—Treat similar to American Yellow Bird.

Cardinal Grosbeak.—Of splendid plumage and exquisite song. They are hardy and may be kept without fire in a room most of the winter, except in the northern states. Allow frequent air and sun. Feed on rough unhulled rice and hemp, wheat, brown gravel, cracked corn, and millet occasionally, with plenty of water for bathing. These birds are long lived, the Philadelphia Museum having one which died when twenty-one years old.

Java Sparrow.—Very delicate, with pretty plumage, but little music. Feed on unhulled rice and canary seed, with plenty of brown gravel.

Purple Finch or Linnet.—A delightful songster. Give canary, hemp, millet, and sun-flower seeds, with juniper and cedar berries through the winter, salad and beet tops in summer.

Any other of the Finch tribe may be fed on seeds generally, as the preceding. Perfect cleanliness of the cage, and a constant supply of fresh water and gravel are essential.

Baltimore Oriole.—A bird of delightful plumage and rich brilliant music, well repaying the utmost care. They eat fruit of all kinds, seeds, insects, &c. Give

them a large cage, protection from frost, and an abundance of insects. Rear same as Mocking Bird.

East India Oriole.—Possesses greater musical powers, and is to be treated same as the Baltimore.

American Mocking Bird.—The sweet "Bird of many Voices," imitating almost every variety of notes and sounds imaginable. Feed regularly every morning with Indian meal mixed with milk, not very stiff. Give wild cherries, cedar, elder, poke and whortleberries. An occasional egg, boiled hard and grated; a little raw minced beef, water for washing as well as drink, with plenty of insects, grasshoppers, spiders, particularly during moulting, when they should be kept quiet and away from cold drafts of air.

Regular Feeding is important. Adopt a regular hour, say eight in the morning for feeding and watering, and strictly adhere to it.

If Sickly, treat kindly, give spiders daily, and meal

worms; gravel the bottom of the cage and keep very quiet.

The Male has a regular line of white feathers in the wing, forming almost a regular curve from tip to shoulder.

American Robin.—Sprightly, beautiful and musical. Treat similar to Mocking Bird.

Red Bird or Bob-o-link.—Is apt to die in November, if too well fed. Give oats, buckwheat, and canary seed, and abundant water for bathing. At other seasons feed same indiscriminately, as the Finch tribe.

Red Wing or Swamp Blackbird. Treat same as Bob-o-link.

Chickweed or salad, which in proper season is excellent, are absolutely poison if given too early, before the bitterness is off, and the cold acrid juices are dissipated by the sun.

NEWSPAPERS.

The importance of good newspapers cannot be over-rated. The following high testimony in their favour, in an extract of a letter from the "Father of his Country," to the late Mathew Carey, Esq. was written June 25, 1788.

"For myself I entertain a high opinion of the utility of periodical publications. I consider such easy vehicles of knowledge more happily calculated than any other, to preserve the LIBERTY, stimulate the industry, and meliorate the morals of an enlightened and free people."

[Signed] GEORGE WASHINGTON.

No Family should be without one or more newspapers. It cultivates in children a desire for reading, and a disposition to learn and improve, renders them considerate, intelligent, and more easily governed.

The number of newspapers in England is 230, and the annual average number of convictions for murder is thirteen. The number of newspapers in Spain a few years ago was one, and the annual number of convictions for murder was upwards of twelve hundred.

How many thoughtless young men have spent their evenings in a tavern or grog-shop, which ought to be devoted to reading! how many parents who never spent twenty dollars for books or for papers for their families, would gladly have given thousands to reclaim a son or a daughter who had ignorantly and thoughtlessly fallen into temptation!

An Editor's position is one of great responsibility, too often misunderstood or unappreciated, and too frequently assumed by the vicious and incompetent. The only correction is in the people's withholding patronage from such news-

papers, as indulge in personal abuse and immoralities, which make some newspapers as great a curse to the community as others are blessings.

The Encouragement bestowed on the press should be prompt, liberal, and always in *advance*. Advance payments are rendered essential to the welfare, if not existence of a newspaper, from the smallness of the sums, the distance to which they are scattered, and the difficulty of collecting, arising from the absence of subscribers when called upon, the want of preparation when found, and the various delays, vexations, and expenses, always attending the collection of many small sums. Besides the impositions to which publishers are exposed, should make their real friends willing to concur in the only rule which can afford protection against dishonest delinquents.

A person receiving a newspaper is bound by law as well as custom and justice, to pay for it so long as he may continue to receive it, notwithstanding any agreement or direction that may have been made for its discontinuance.

"A newspaper can drop the same thought into a thousand minds at the same moment. A newspaper is an adviser who does not require to be sought, but comes to you of its own accord, and talks to you briefly every day of the common weal, without distracting your private affairs. Newspapers, therefore, become more necessary in proportion as men become more equal, and individuals more to be feared. To suppose that they only serve to protect freedom, would be to diminish their importance; they maintain civilization."

ADMONITION.—The tavern-haunter drinks till he feels himself half-ruined; he is wretched; he drinks to drown his wretchedness; he does drown it, and his soul along with it!

To young men, beginning life, especially to newly married men, the counsel is seasonable: *Reverence*

the Fireside. Admit no rival here. Let your chief joys be shared by her who has forsaken all other hearts and hopes for you; by those who must inherit honour or disgrace from your course of life. Shun the bar-room and the purlieu of intoxication. They are, to thousands, the avenues to infamy.

HEALTH.

PUBLIC ECONOMY AND PUBLIC HEALTH.

It has been well said, by a recent writer, that if part of the large sums expended on over-fed Hospital patients, and pampered nurses, on rents and Dispensaries, and outlay of medicine, were *appropriated to the prevention of diseases* among the poor, it is probable that more extensive benefits would be conferred, than can be afforded in the limited and local range of Infirmarys. If half the amount annually spent in the purchase of liquors and medicines, for charitable institutions, were *early and judiciously* laid out in precautionary means of preventing diseases among the indigent, the hospital would have fewer inmates, and the asylums for orphans would not be so crowded. Among these preventive means be it added, that the chief are to ward off the evils of intemperance, and to protect the system against atmospheric inclemencies.

The expense of an establishment in every village, *free to the poor*, or at least at a small nominal rate, where they could enjoy the advantages of warm and tepid baths, with a drying stove for their clothes, and such other auxiliary means as humanity might suggest, would be a minor consideration, when put in competition with the benefits resulting to the working classes, in warding off impending diseases, and the inevitable ruin which is almost invariably attendant in their train.

Almost every village has its alms-house. True charity ought to be displayed in preventing the necessity for such buildings. Now we hazard little in asserting that, if under the same roof were to be found public baths, a public library, and a hall for a temperance association, the poorer inhabitants of our towns and villages would be healthier than at present, and in place of being a burden, would contribute their share to the support of the state.

DIETETIC MAXIMS.

1. A healthy appetite is to be acquired by early rising, regular exercise in the open air, and abstinence from intoxicating liquors.

2. The food should be eaten slowly, and well masticated.

3. Animal food is sooner digested in the stomach than vegetable; but it is more stimulating or heating to the system. Flesh long salted, dried hams, beef, &c., are less easily digested and less nutritious than fresh meat.

4. Farinaceous and vegetable food, generally, is slower of digestion than animal, but it is less heating.

5. Solid food, or food of a certain fibrous or pulpy consistence, is more fitted for digestion in the stomach than rich soups, jellies, and all highly concentrated

saucers. The latter are rendered more digestible by the addition of bread.

6. Fish are not so nourishing as the flesh of land animals. The white fish are less apt to disagree with the stomach than the red.

7. Roasted meat is more nourishing than boiled, but much more stimulating.

8. Bread should be perfectly raised, fully baked, and one day old.

9. Salt, and a moderate quantity of pepper, are safe: beyond this, all seasoning becomes injurious.

10. Different dishes at one meal, interfere with digestion.

11. All excess in eating should be avoided. The best guide is to be found in the calls of a healthy appetite.

12. Health, and strength of body, depend upon the health of the stomach and consequent perfection of the digestive powers.

13. Water is the most wholesome drink. Toast and water, sweetened water, or water with a slight addition of a vegetable acid, are useful diluents during the summer.

14. Distilled and fermented liquors impede digestion; and, when drunk to any extent, invariably destroy the tone of the stomach, and of the system generally.

15. When the stomach is weak, but little fluid should be taken during or after eating.

16. Exercise should be used in the intervals between meals, but not immediately before or after them.

ACCIDENTS.

There are few things in relation to which people commit more egregious errors, than the proper assistance to be rendered to individuals to whom an accidental injury has occurred. In that of a wound attended with a profuse discharge of blood, the patient's life would be destroyed by a few moments' delay; while in every case a trifling injudicious interference in the offset, may add greatly to the subsequent danger and suffering: it is important therefore that the public generally be made aware of the proper course to be pursued, when an accident occurs, previously to the arrival of the physician.

Wounds.—The only proper dressings for these accidents are such as are best calculated to keep the wounded surfaces in contact, and to defend them from the air and external injury. The milder and softer the materials of which they are composed, the better: above all, everything of a heating or irritating nature should be avoided. A simple cut, which might have been healed perfectly in a few days, has often been converted into a serious, painful, and tedious sore, by such applications as brandy and sugar, turpentine, balsams, and the like; or by having crammed between its edges a quantity of lint, tow, soot, charcoal, or cobwebs; all of which are frequently resorted to. They invariably induce a degree of inflammation, which interrupts the healing process of nature.

When a wound has been received, the first thing that claims attention is the presence of any foreign substance, as splinters of wood, portions of stone, glass, or bits of cloth, &c. These should, if possible, be at

once extracted, and the wound washed with a soft sponge or rag and water. But when the exhaustion of the patient is considerable, or the flow of blood profuse, whatever foreign substances may be contained in the wound, must be suffered to remain until, in the judgment of the physician, it may be safe to attempt their extraction.

The bleeding from a wound, even though at first profuse, will often in a short time cease spontaneously, and, if the injured part be kept at perfect rest, will not again return. Should this, however, not be the case, and the flow of blood is very considerable, especially if it be in a continued stream or in jets, it should be arrested without delay, by making pressure upon the divided vessels, between the heart and the wound. When the injury has been received in either of the limbs, a firm broad ligature or bandage should be applied a short distance above the wound. The best plan is to place around the limb a strong broad garter, sufficiently slack to allow of a short stick being introduced under it, and by which it is to be twisted until it is tight enough to arrest the bleeding. Of course, this is merely a temporary expedient, as the continuance of such a bandage for any length of time would be productive of injury. In wounds situated in a part of the body where the above means cannot be resorted to, the bleeding may be arrested by applying the hand firmly over the wound; or, by the finger passed within the wound, pressure may be made directly upon the orifice from which the blood proceeds.

In slight wounds, which do not penetrate much deeper than the skin, nothing better can be applied than the common sticking-plaster. This, by keeping the edges of the cut together, and preventing the contact of the air, &c., permits the process of union to go on without interruption.

Persons who have received a severe wound, or indeed a severe injury of any kind, ought always to be kept at rest, and perfectly composed. The part especially in which the wound exists, should be prevented from any degree of motion, and be kept as elevated as possible without its being placed in any constrained posture. Quiet and cheerfulness of mind are also of importance.

Sprains and Bruises.—The part in which these accidents have been received must be kept at perfect rest, elevated, and completely free from any heavy dressings or tight bandages. The best immediate applications are cloths wet with cold water or cold vinegar and water. It is a very common error, whenever any severe accident of this kind occurs, to have the individual immediately bled. In all cases of accident, much evil is liable to be produced by the loss of blood before the system has in some degree recovered from the depression into which it is invariably thrown upon the receipt of any severe injury: it is better always to delay bleeding until the advice of a physician can be procured.

Burns and Scalds.—When of moderate extent, and occasioning only a redness of the skin, the best immediate application to a burn or scald is cold water or cold vinegar. The application or immersion should be continued for some considerable time, and without a moment's intermission. When the skin is raised in large blisters, these should be punctured; after which a mixture of one part of linseed oil and two of lime-water, smeared over the burnt surface, will be found a very soothing application. The burnt part may then be wrapped in raw cotton. When the burn is extensive, and has completely destroyed the skin, the application of spirits of turpentine is attended with the best effects: care should be taken to confine it to the injured parts, not allowing it to come in contact with the sound skin. As the ulcer consequent on a burn is always tedious in healing, and, when mismanaged, liable to be attended with an unsightly scar, or even extensive deformity, the attendance of a physician should be procured.

TREATMENT OF DROWNED PERSONS.

As soon as the body is recovered, wipe it dry, and wrap it up in blankets, and place it in some convenient place, with the head slightly elevated; having free ventilation in hot weather, and allowing no persons to be present except those employed in operating. Let the head be wiped dry, and covered with a woollen cap. Several attendants should be employed in rubbing the body with stimulating articles, such as mustard, hot brandy, &c., and bags of hot sand, hot bricks, &c., applied to the feet and other parts of the body. While this is being done, the mucus should be removed from the mouth and nostrils, and other persons should be employed in inflating the lungs, as follows: Insert the pipe of a common pair of bellows into one nostril, close the other nostril and the mouth, then blow gently, and cause the air to escape by pressing on the chest, having first removed the finger from the nostril. This is to be continued for a long time, the object being to imitate the process of breathing. Let this plan of treatment be pursued until the arrival of a physician.

CAUSES OF DISEASE.

Insufficient Exercise.—He who does not spend several hours every day in some active exercise, must inevitably suffer from a diminution of bodily strength, defect of appetite, and imperfect digestion, and becomes sooner or later the subject of disease.

Late rising and late retiring.—There are few things which contribute more to shorten life, than the habit of keeping late hours, and consequently of rising from bed late in the morning. The advances of weakness and disease from this cause are, it is true, by very gradual steps, but not the less certain to be ultimately felt.

Breathing impure air.—A constant supply of fresh air is highly important. The air is rendered impure by being loaded with animal and vegetable exhalations, by its free circulation being prevented by a number of persons breathing it when confined in a close chamber, and by the processes of fermentation and combustion.

Insufficient ablutions of the body.—It is not enough for the preservation of health, that merely the hands, the feet, and the face be washed frequently, but that the whole surface of the body be repeatedly purified. To all, the frequent use of the bath is an important means of preserving health. Means for bathing should be afforded in every city, and in every extensive manufactory.

Inattention to the cleanliness of clothing and dwellings.—Independently of the injury which the health of individuals suffers from a neglect of strict personal and domestic cleanliness, the contamination of the air, from the decomposition of filth accumulated in and about a dwelling, has not unfrequently communicated disease to whole families and neighbourhoods. Repeatedly white-washing the walls of a house, and scrubbing the floors, is not merely, therefore, a source of tasteful comfort, but a direct means of preserving health.

Food rendered pernicious by modern cookery;—Adulteration in foods and drinks, and abuse of appetite.—While a moderate quantity of plain wholesome food is essential to the maintenance of life, all excess in its use, all complicated processes of cookery—keeping up the appetite beyond the wants of the system—are decidedly injurious. The health and strength of the body are not supported by the quantity of food consumed, but only by so much as is capable of being converted, by the powers of the stomach, into pure chyle and blood.

The unnecessary or imprudent use of medicine.—Domestic quackery has ruined many constitutions. A dose of medicine taken with the view of preventing an attack of disease, not unfrequently invites one which otherwise would not have occurred.

Defective and improper clothing.—Injury to health may be caused either by the clothes being inadequate to defend the wearer from the cold, or from sudden changes in the weather, by their impeding the free motions of the limbs, or by their compressing or binding too firmly some part of the body.

The influence of cold.—Disease is produced by exposure to the night air or inclement weather, after being heated in crowded apartments, or by exercise, as dancing, &c. In the poorer and improvident classes, cold, during winter, is a continued and fruitful source of suffering and disease.

Intense application of the mind.—Alternate rest and activity, as well of the body as of the mind, are essential to the support of health. Long continued mental application, whether in study or the cares of business, wears out the system, and exhausts the powers of life even more rapidly than protracted manual labour.

Giving way to the passions.—Experience fully proves that nothing contributes more effectually to guard the system from disease, and to prolong life, than a calm and contented state of mind. In cultivating a peaceful and virtuous disposition, a man not only insures his happiness but promotes his health also.

Heart-Burn, Acidity of Stomach, Water Brash.—These are some of the symptoms of indigestion. Ascertain whether the stomach does not suffer most in this way, after eating particular articles of animal food, such as dried and salted meats and fish; and vegetables, such as salads, radishes, tomatoes, cabbage, and even potatoes. If no fault is found from these causes, let the inquiry next be made into drinks, and whether the accidental omission of a favourite beverage has not given relief. Has fresh bread or hot toast been habitually used with plenty of butter? and if so, has stale bread ever been substituted in its place? Is the complainant a smoker or user of tobacco in any way? If so, he ought to abandon entirely the use of this weed. Disturbed state of digestion coming on during the regular and moderate use of proper food, the next question is, does the skin perform its duty? Is it properly covered with clothes? are the feet kept dry and warm? are the pores kept free by regular ablution and friction?

Indigestion or Dyspepsia, which includes the forementioned disorders, and numerous others, as well of the stomach as of the heart, is shown by irregular palpitation; of the lungs, by asthmatic breathing; of the brain, by head-ache, ill-humour, and strange fantasies. Here the dyspeptic must ask of him or herself the same questions as in the preceding paragraph, with the additional ones respecting regular daily exercise in the open air, regular hours of sleep, early to bed and early to rise, mastery of the passions, and an especial avoidance of anxious cares, envy, or jealousy.

Bilious disorders.—If a person is bilious, it is generally owing to errors in regimen. Let these be reformed, and the complaints will cease. But if a person would be always bilious, let him be often taking calomel, or blue pill, or active purges, Lee's antibilious, &c., and he will certainly succeed: the soundest liver will not be proof against such remedies for bile.

Costiveness.—Accidental or occasional costiveness may readily be rendered habitual by oft swallowing purgative medicines; the proposed cure will, when persisted in, inevitably bring on the disease. If this latter, by time or imprudence, has become habitual, the only safe and effectual mode of relief will be in a suitable regimen; still trying to get the proper food—mild mucilaginous and saccharine substances of the vegetable, and plain, not too much cooked, meats, among the animal kingdom. Add to this, suitable ablution, frictions of the skin, and out-door exercise and labour, and the cure will be complete.

Wakefulness.—The cure for this is not in laudanum and opium, which, much used, constitutes a habit as pernicious to health and morals as drinking ardent spirits. If something must be swallowed before going

to bed, to procure sleep, let it be half a pint of hot water: mind! as hot as it can be sipped. But the true cure will be by omitting tea or coffee, whichever has been used, in the evening; by taking plenty of exercise in the open air; working at something to produce a little fatigue; and finally, rising early in the morning, whether inclined to do so or not. Be up by times; sleep not during the day; and retiring in good time to bed, there is no danger but you will sleep soundly during the night.

Nervousness, low spirits, sick head-ache.—The causes are, bad habits, false indulgences. Leave them off, and the cure will be complete. Neglect this advice, and you may be physicked until you are a shadow, and your pocket empty, and you will still be, if a female, hysterical; if a male subject, hypochondriacal—miserable yourself, and the cause of misery in others.

TOAST AND WATER.

An infusion of toasted bread in water, is one of the most salutary drinks that can be taken by the sick and valetudinary. A distinguished physician says, five or six cups of this water, with or without sugar, were more refreshing, and sooner took off any fatigue or uneasiness, than any strong wine, strong ale, small beer, warmed coffee or tea (for he tried them all), or any other liquor that he knew of.

It is seldom that toast and water is properly made, and we therefore think it proper to furnish our readers with the following recipe:

Take a slice of fine and stale loaf bread, cut very thin (as thin as toast is ever cut), and let it be carefully toasted on both sides, until it be *completely browned all over*, but not blackened or burned in any way; put this into a common deep stone or china jug, and pour over it, from the tea-kettle, as much clear boiling water as you wish to make into drink. Much depends on the water being actually in a boiling state. Cover the pitcher with a saucer or plate, and let the drink become quite cold. It is then fit to be used: the fresher made, the better, and of course the more agreeable.

In dyspepsia, and a disordered state of the bowels, toast and water ought to be the habitual drink.

TIGHT DRESSING—CORSETS.

The only rational form of dress is that which protects the wearer from the vicissitudes and inclemency of the weather, and allows to the limbs their natural movements, and to all the parts and organs of the system the free performance of their appropriate functions. Every kind and article of dress which has a contrary effect, is absolutely injurious to health, and ought at once to be abandoned.

The motions of the body, as well as its erect position, depend upon the action of numerous masses of flesh, endowed with the property of active contraction, and denominated muscles. The perfection with which these perform their office in either of the above respects, is always in proportion to their strength or tone, and their freedom from every artificial restraint. Now it is an invariable rule, that if constant pressure be made on any set of muscles, by means of a tight dress or a bandage, they will soon diminish in size, and consequently lose both their power of supporting the body in its natural position, and their ability to produce the easy and natural, or in other words, graceful movements of those parts to which they belong. This is strongly exemplified by the state of a limb that has been confined by the necessary dressings in consequence of a fracture, or by those impostors who, in many of the European cities, bandage firmly their legs or arms until they are diminished frequently to one half their natural size, for the purpose of exciting commiseration and extorting alms, or of avoiding military duty. An unequivocal condemnation should be pronounced, therefore, on all those kinds of dress

which compress, in the least degree, any part of the trunk or limbs, and which in that manner cramp the free motion of the muscles, and reduce their size and plumpness. Tight lacing, by means of corsets or bands, and laces of all descriptions, as well as tight sleeves and garters, invariably produce, more or less, these effects; and so long as their use is continued there is no means of obviating the injury which results from them: and let it be recollected that this injury is always greater, the earlier in life they are adopted.

We have not yet enumerated all the evils produced by firmly compressing the chest. Independently of the uneasiness which this compression inflicts upon the female, from the constrained position she is forced by it constantly to assume, indicated by the frequent shrugging and writhing of her shoulders, and constant restlessness when in full dress, and which, of itself, often gives the back an ungraceful twist, and throws the shoulders out of their natural position, other serious and permanent inroads upon health and beauty are effected. The pressure of the corset depriving, in a great measure, the muscles of the back, by which the upright position of the body is maintained, of their natural action, and the blood being prevented from circulating freely through their vessels, they become relaxed, and allow the body to bend ungracefully either to one side or forwards: in time, the curvature of the spine which results, becomes permanent, and the individual is often in this manner deformed for life. But this is not all: the health and vigour of the system, the freshness and brilliancy of the complexion, the very activity and cheerfulness of the mind, depend in a very great degree upon the blood undergoing a perfect purification in the lungs. This is effected by its being brought in contact, in these organs, with a sufficient amount of pure atmospheric air: whatever impedes the free expansion of the chest in breathing, and diminishes the amount of air inhaled into the lungs, prevents this purification of the blood from taking place. Now, the corset, by firmly compressing the chest and loins, does this to a very great extent; so much so, that in all females who have been in the habit of wearing it from their youth, the chest has absolutely a diminished capacity, and loses that fine arched form which constitutes the beauty of the female bust. By numerous experiments it has been found that females thus circumstanced take into the lungs a much less amount of air than those who have never worn a corset. The vigour of the whole system becomes in consequence prostrated; the skin assumes a sallow hue, and all the functions of life are performed imperfectly. The lungs and heart especially suffer, and in many cases become sooner or later the seat of incurable disease. The pressure by the corset upon the stomach and liver, is also highly prejudicial to health, by impeding digestion and the free secretion of bile; in this manner, independent of the injury inflicted upon the lungs, it causes discoloration of the skin, and a haggard, wrinkled appearance of the countenance. We urge, therefore, upon all, the disuse of this ridiculous and pernicious portion of female dress, which, so far from adding any real grace or beauty to the form, is the cause of disease, suffering, and deformity. We laugh at the folly of the Chinese belles, who compress their feet until they are no longer fitted for walking; and at the African, who flattens their noses as an indispensable requisite of beauty; and yet our own females are equally ridiculous, and even more criminal, when they imagine that they improve the beauty of their chests and waists by distorting them from that form which nature has wisely imparted to them; and thus, by a perverted taste, entail disease and pain upon their daughters, or hurry them into an early grave.

TIGHT LACING.

A physician in Albany gives a heart sickening account of the decease of a fine and amiable young lady who fell a victim to fashion: she laced herself to death! Apart from the prevailing infatuation which

leads females to commit elegant and refined suicide, she is said to have been an uncommonly intelligent and promising girl. The body presented a dreadful sight. The ribs were contracted, the chest was narrowed, and not half the natural room was left for the action of the heart and the inspiration of air into the lungs. The consequence was death!

CAUSES OF DEATH AMONGST WOMEN.

The Registrar-General of England reports that thirty-one thousand and ninety English women died in one year of that incurable malady, *Consumption*. Will not this impressive fact induce persons of rank and influence to set their countrywomen right in the article of dress, and lead them to abandon a practice which disfigures the body, strangles the chest, produces nervous or other disorders, and has an unquestionable tendency to implant an incurable hectic malady in the frame? Girls have no more need of artificial bones and bandages than boys.

CONSUMPTION.

This disease is, doubtless truly, considered more common than in former years. There are reasons for this.

Half a century ago, people lived on common, simple, healthful food and drink, and were healthy. In those days the dress of men and women was plain, and suited to the climate in which they lived, and to the various seasons of the year. At this time, how different! The fashions of the pleasure-seekers of Europe are brought to this country, and females of all classes endeavour to imitate them, until Consumption follows, and death ends the short race.

In addition to a thin dress, their clothes are tight, the natural shape is crowded upon, and it is sometimes hard for them to stoop or breathe easy. A violent cold is taken, and a bad cough follows; symptoms of consumption are feared and mentioned, and at last it is seated, and the poor fashionable daughter or wife is taken away by what is called the Quick Consumption.

THIN SHOES.

The practice of wearing thin shoes is too common among American women, and cannot be too strongly animadverted upon. Let those who thus throw themselves in the suicide's path reflect upon what they are doing.

We say to every one, wear good strong thick shoes, and overshoes whenever there is water or snow in the street. Never mind if your feet do look a little large; even if they should appear clumsy. A little-looking foot is not of so much importance to health and happiness as a good pair of lungs; and those who act the part of wisdom will dress to insure health, and let Fashion and Fashion's fools go to destruction in the way that they love to travel.

Fasting, distinct from religious ordinances, has been frequently recommended and practised, as a means of removing incipient disease, and of restoring the body to its customary healthy sensations. Howard, the celebrated philanthropist, used to fast one day in every week. Franklin, for a period, did the same. Napoleon, when he felt his system unstrung, suspended his wonted repasts, and took his exercise on horse-back. This list of distinguished names might, if necessary, be increased.

Baglivi, the celebrated Roman physician, mentions, that during Lent, an unusually large proportion of the sick in Italy recover their health. It is indisputable, that the fashionable classes in England and this country suffer from the effects of high living and the want of proper occupation. It is one of the greatest misfortunes that can befall human beings, to live without an aim; to have no noble object constantly to draw forth the powers of the mind and the exertions of the body.

Croup requires instant attention. It arises from colds and shows itself in tightness of the breast, difficult breathing and fever. Immediately soak the feet in warm water, bathe the throat and breast with goose-grease, to which hartshorn may be added. Give a tea-spoonful of Hive Syrup to a child two or three years old, and again in 15 minutes, until it causes vomiting. If very bad, and no Hive Syrup at hand, then use, 1. Lamp Oil. 2. Goosegrease and Molasses, with Onion Juice. 3. Wine and Molasses. 4. Apply a plaster of Yellow Snuff mixed with Lard to the breast: each are good. After the symptoms are abated, give some mild purgative. These remedies, promptly applied, can be relied on where the physician is not at hand.

Piles.—1 oz. Cream Tartar, 1 oz. Salts Nitre, 1 oz. Jalap, 2 oz. Linitive Electuary. Mix stiff in molasses. Dose, 4 or 5 pills size of a pea.

Vinegar (good) is useful in inflammatory and putrid disorders; in weakness, faintings, or other hysteric affections, bathe, smell, or drink: it cools the blood, quenches thirst, extracts the fragrance from flowers, &c. That made from cider or wine is best.

Children allowed to sleep with aged people, lose their health and decline. The same is probably also true, where the sick and the healthy habitually lie in the same bed.

Toothache is cured by powdered Alum, 2 drachms; Nitrous Spirit of Ether, 7 drachms: mix. See *Brandy and Salt*.

Hair is preserved by Onion Juice and Brandy, rubbed well in. Or, Tincture of Cantharides 10 parts, Hog's Lard 90 parts: to be mingled and rubbed into the roots. Or, one part of Cantharides Powder to eight of alcohol, carefully mixed.

Polypus of the Nostril is cured by the root of the *sanguinaria canadensis*, or blood root. A decoction is applied to the part.

Rheumatism.—Dissolve half oz. Camphor in pint Spts. Turpentine, and rub well morning and night: then apply flannel. Good also for Burns, Scalds, and Bruises.

Frost-Bitten Feet.—Dissolve half pound Alum in 1 gallon warm water, and soak 15 minutes.

Convulsion Fits have been cured by drinking salt and water two or three times a day.

Vegetable Eating, in promoting health and longevity, has never yet been overrated. It will prolong and render much more comfortable those afflicted with cancer, aneurism, ossification of the heart, consumption, &c.

Oxalic Acid is neutralized by two ounces of Magnesia; mix quart of water: or, by same quantity of common whiting, thrown into the stomach.

Cough.—*Brown Mixture.*—Stick Liquorice, 2 oz.; Gum Arabic, 1 oz.; Paregoric, 1 oz.; Antimonial Wine, 1 oz.; Rock Candy, 2 oz. Take a table-spoonful 3 or 4 times a day.

Another.—2 spoonfuls Molasses, 1 do. Sweet Oil, 1 do. good Vinegar, to which may be added a few drops Sweet Spts. Nitre. Take a tea-spoonful occasionally.

For Tetter, &c.—1 lb. fresh Butter, without salt, 1 oz. White Precipitate, half oz. good Turpentine: mixed and heat to an ointment.

Friction of the body is one of the most gentle and salutary kinds of exercise, cleaning the skin, dispersing stagnating humours, promoting perspiration, strengthening the fibres, and increasing the warmth and energy of the whole body.

The Complexion can only be preserved in freshness, softness and beauty, by cleanliness, regular exercise, temperance, a plain diet and pure air, and a cheerful temper.

Worms in children are by no means so pernicious as many of the quack medicines which are advertised to expel them.

Long life may safely be insured to all who enjoy good gifts without abusing any.

Brandy and Salt as a Medicine.—It is useful in the reduction of inflammation of fractured limbs or bruises, the alleviation of incurable sores, cure of ringworms, headache, toothache, inflammation in the eyes, ague, colic, pains in the side, chilblains, burns and scalds, cancers, sprains, open sores, asthma, and complaints of the lungs. Fill a bottle three-quarters full with good Brandy, after which add as much Salt as will fill the bottle for corking; shake it together 20 minutes; let the Salt settle to the bottom, and do not shake it up before using. The clearer it is used the better. A bottle of this preparation should be constantly kept ready for use, as its virtues have been fully tested. When taken inwardly, for asthma, bowel complaints, &c., mix two spoonfuls with equal quantity of warm water.

Cancer.—Five out of six cases have been cured by Brandy and Salt, described above. The pain is very severe, but temporary.

Poison, from vines, may be cured by bathing in Whiskey and Cream, and cooling with Rye Flour: if obstinate, use a strong solution of Copperas.

Reading aloud, speaking, and particularly singing, affords a healthful exercise; while wind-instruments are injurious.

Meat is so little necessary, in fact, that millions of the most robust and healthy population in Asia, Europe and other parts of the world, subsist exclusively on such articles as rice, wheat, and vegetables, alone.

Cravats or stocks should not be worn so tight as to compress the many large blood-vessels of the neck, which connect with the brain.

Impure air of theatres, ball-rooms, and other crowded and badly-ventilated buildings and sleeping-rooms, is poison to the lungs.

Eye-Sight is best preserved by a moderate light—too little strains—too much dazzles and injures. Bathing in cold water is of service.

Consumption.—Remedies.—Vigorous, daily, but not violent, exercise, and free exposure to the air, are important. As the great difficulty in medicine is in reaching the seat of this disease, frequently inhaling certain fumes may be a means of healing the lungs. Sitting and sleeping in a room through which the fumes of rosin, turpentine, or other similar gums are moderately diffused, may be of service.

Small Pox is prevented by vaccination, if well done. Never neglect vaccination.

In "training," an English boxer, to acquire the greatest possible vigour, health, and animal spirits, takes daily four hours exercise in the air, keeps the body and mind occupied; food of easy digestion and in small quantities; uses no ardent spirits, and sleeps eight hours, observing strict temperance in all things. By these means his appetite and digestion become good, the mind cheerful, lungs strong, and the whole system wonderfully improved.

Bed-rooms heated are pernicious to health.

Water is purified by—1, filtration through gravel, sand, or soft porous stone and charcoal. Or, 2, it may be sweetened and improved by charcoal, coarsely pulverized and thrown into a vessel of water, 3, by boiling and distillation. Water is greatly improved in wells or pumps that are frequently used.

Distilled Water, after being exposed to the air, is the most salubrious of all drinks, and its daily use is of the greatest importance in dyspepsia and similar diseases.

Feather Beds, especially in youth and in warm weather, enervate the system, destroying its vigour and health. Neither should beds be too hard. Sleeping with the head under the clothes is pernicious; so also, confined air caused by curtains.

The floor is the unhealthiest part of a room, from the tendency of impure air to descend.

Ulcers that proceed from a bad state of the body, should never be dried up till the system becomes purified by regimen or medicine.

Midnight Studies ought to be avoided, as in the highest degree pernicious.

Bruises.—Bathe with Vinegar, and keep cloth wet with Vinegar constantly applied. If very violent, bleeding may sometimes be necessary. Poultice of Bread, Elder or Camomile Flowers, with equal parts of Vinegar and Water: renew two or three times a day. See page 20.

Burns or Scalds.—For two or three days anoint freely with Lime-water and Oil, mixed. Poultices of Bread and Milk, softened with fresh Butter, to abate the heat and inflammation. Diet, and keep the body open. See page 20.

Wounds.—No external application aids the cure in any other way than by keeping the parts soft, clean, and defending from the air. Nature alone effects the cure. See page 19.

Bleeding.—Between the heart and intended puncture apply a bandage, an inch or two off, to swell the vein and cause a free flow; which must be gradually loosened as the blood flows. In all topical affections, draw the blood as near as possible to the affected part. Have the bandage an inch or two wide and about a yard long, and a compress of one or two small pieces of linen, folded two inches square, to lay over the puncture when the bleeding is stopped. Care must be taken not to cut too deep, or over a tendon or artery. Though great advantage may be had by bleeding in the beginning of some inflammatory fevers, in apoplexy, and after severe injuries, &c., it should not be attempted by persons not skilled in anatomy.

GENERAL REMARKS

On the Means of Securing Health.

IN regard to receipts and "cure-alls," however promising they may appear, it should always be borne in mind, that what for one person may have proved a positive cure in a particular disease, may prove positively injurious when tried by another for the same disease, or even when repeated for the same individual. The reason is obvious. So much depends upon the different habits, constitution, state of the humours, blood, degree of weakness or strength, &c., in different individuals, and at different periods in the same individual. The medicine which to-day would be proper, by a change in the disease, may to-morrow be the reverse;—and, in short, so many objections will occur to any reflecting mind against the indiscriminate use of remedies, that the greatest caution should be exercised, lest in tampering with disease you destroy health. There is so much adulteration in drugs, so many quack nostrums, pills and impositions, that in all cases of doubt and difficulty, the safer rule is to trust the advice of an intelligent physician.

TO PRESERVE HEALTH,—to guard against disease, should be the object, on the score of economy, comfort, and safety; and this may be accomplished in all cases, unless under rare and very peculiar circumstances of exposure. A uniform state of health may be maintained until old age, by a careful observance of the rules already set forth.

These are briefly—1st. A PLAIN, WHOLESOME DIET, bearing in mind that high-seasoned compounds, hot dough, under the name of cakes, &c., or dough and grease, under the name of pastry, will essentially ruin the best stomach; and that intemperance in food, drink, and dress, is the foundation and cause of nine-tenths of all the diseases and distress which afflict the human race.

2d. EXERCISE, observing that while to the weakly too sudden, too violent, and long-continued exercise, may be injurious, it is otherwise of the greatest importance. Those who cannot take other and better, may secure much of the advantages of exercise by active friction of the body on retiring to bed and on rising, and by frequent exertion and change of the position.

3d. CLEANLINESS. 4th. PURE AIR. 5th. To guard against taking COLD, which may in all cases be done by acquiring the habit of daily washing the person in cold water, especially the neck, breast, arms, feet, &c. This may be rendered easy by habit, and safe at all seasons, by commencing in warm weather, and rubbing with a rough cloth until a glow is excited. This will always be found, and under any exposure, a means of security from cold—that fruitful source of consumption and death.

6th. A due regard to the ease and comfort of CLOTHING. See articles under these several heads, also, "training," page 23.

Some of these points are so important, that we again say—

Observe to—1. Rise early and never sit up late. 2. Wash the body every

morning with cold water, rubbing well with a rough towel. 3. Sleep in rooms well and thoroughly ventilated. 4. Correct symptoms of plethora and indigestion, by eating less for a few days. 5.

Never eat late hearty suppers, especially of animal food. 6. Keep the feet warm, the head cool, and the body open, and the physician's aid will be seldom required.

THOMPSONISM, OR BOTANIC PRACTICE.

A list of the Simples used, with their names and the properties ascribed to them :

Lobelia, or Emetic Herb, to cleanse the stomach, overcome the cold, and promote free perspiration; considered the most important article in that system of practice. This plant differs from Indian Tobacco. It is common in all parts of this country; grows at first flat on the ground, but shoots up 12 to 15 inches high, with branches, and in July has small pointed, pale blue blossoms, followed by small pods, size of a "white bean," with numerous small seeds. Gather in September, when the leaves and pods turn a little yellow, though good at all seasons. Some seasons it is not to be found at all, or in very small quantities. Cut, dry it in-doors, and use the seeds and leaves powdered, or make tincture from the green herb, with spirit. Common dose, teaspoonful powder mixed with sugar in half tea cup warm water; take all at once, or three times at intervals of ten minutes. Water must be only blood warm; its power is destroyed by scalding. The *Tincture* is made by the bruised green herb with equal quantity good spirits or vinegar. Squeeze and strain it to extract the juice, which save in a close-stopped bottle. Dose, from half to a teaspoonful: in all cases the dose must be regulated by the judgment. Taken for asthma, complaints of the lungs, and applied internally or externally to counteract poison; also for lock-jaw, spasms, and to bring out small pox, measles, &c., and give warmth, animation, and vigour to the system. Its operation in long-standing disease is sometimes very severe, and will not remove a seated disease unless its stimulus is followed by some other more nourishing medicine.

Cayenne, when good, is used in doses of from half to a teaspoonful, in hot water sweetened, or a teaspoonful in a glass of cider, to promote free perspiration and digestion, and cures ague in face by laying some in a fine cloth between the teeth and cheek, sitting by a fire, covered warm. Ripe Red Peppers are good substitute.

Ginger, a powerful stimulant, has a warm, healthful effect on the stomach. The root is chewed and juice swallowed for consumptive habits.

Bayberry or *Candleberry* roots: the bark is used for canker, tooth powder, scurvy, and disorders of the bowels. Dose, a spoonful in hot water sweetened.

White Pond-Lily roots, used as the preceding. Cleaned and dried in the Fall.

Hemlock.—The inner bark, powdered, though sometimes used as the two preceding, is not recommended. The boughs make a tea good for gravel and other urinary obstructions, and rheumatism.

Marsh Rosemary, mixed with Bayberry bark, is used for canker and sore mouth.

Sumach: the bark, leaves and berries dried when full grown and full of sap, are used either as tea or injection, for cleansing, complaints of kidneys, stranguary and urine. Better if used with Bayberry.

White Hazel leaves, as tea, good for bleeding at stomach, for canker, and most complaints of bowels. Injection good for piles, bearing-down pains, &c.

Red-Raspberry leaves, excellent for women in tra-

vail, made into tea, sweetened and with milk; also for bowel complaints of children, and sores.

Squaw Weed, or meadow scabish, grows four or five feet high, narrow leaf and blue blossom: use the roots and top for canker rash, rheumatism, dizziness and nervous affections. Make into tea.

Bitter Herb or *Balmomy*, about size of mint, white blossom like a snake's head, sweetish-bitter taste. As tea, good to correct bile, promote appetite and digestion, and keep the stomach in order.

Poplar Bark, *Barberry Bark*, *Bitter Root* or *Wandering Milk-weed*, *Golden Seal* or *Ohio Kercuma Root*; each used as tea for same complaints as Bitter Herb.

Peach Meats, bark of poplar, meat of cherry stones or bitter almonds, pounded and used as tea, for dysentery and debility of stomach and bowels.

Gum Myrrh, recommended highly in wounds, old sores, and rheumatism: improved by an addition of Cayenne.

Spirits of Turpentine, to be used externally, with caution, with rheumatic drops, for itch and other bad humours.

American Valerian or *Ladies' Slipper*: the roots, dug late in Fall or in Spring, are highly extolled in nervous affections and hysterical symptoms, safer and better than opium. Give half teaspoon, finely powdered, in hot water sweetened, or put into injections. Grows in swamps, wet land, and high ledges; large clustered fibrous roots matted together and connected with solid root; several stalks two feet high, leaves like poke leaf, female blossoms red, red and white, and white. The male is called yellow umbil. The yellow and red are best.

There are some others, as pennyroyal, mint, tansy, &c., which Dr. Thompson pronounces of less consequence; but the preceding are declared by him to be "all the important vegetables and herbs used in his practice." For lobelia and some other medicines he has secured a patent right. The charge for his book and the right of administering medicines is twenty dollars. But of late, much contention and division have arisen among his followers, leading to important changes, principally caused by opinions unfavourable to the acquirements and intelligence of the man, whatever virtues or merit may be ascribed to some of his early discoveries.

Dr. Thompson lives in Boston. In his account of the system which he claims the merit of, he states that he was born in New Hampshire, in 1769; discovered lobelia when four years of age, whilst searching for cows in a field: he chewed the plant and noted its effects. He commenced practice in 1805. He places great reliance on exciting profuse perspiration; repudiates minerals, especially mercury, in all its forms, and is opposed to bleeding.

TEMPERANCE.

Being satisfied from observation and experience, as well as from medical testimony, that ardent spirits, as a drink, is not only needless but hurtful; and that the entire disuse of it would tend to promote the health, the virtue, and the happiness of the community: We hereby express our conviction, that should the citizens of the United States, and especially all young men, discountenance the use of it, they would not only promote their own personal benefit, but the good of our country and the world.

(SIGNED)

James Madison
 Andrew Jackson
 John Quincy Adams
 Martin Van Buren

President JEFFERSON said, "The habit of using Ardent Spirits by men in public office, has produced more injury to the public service and more trouble for me, than any other circumstance."

Ardent spirits has made at least two hundred thousand miserable paupers in the United States, many of whom once enjoyed a competence, if not wealth.

It has annually destroyed thousands of our fellow-citizens, consigning them to a drunkard's grave, and seriously multiplying widows and orphans.

It has filled the jails, prisons, and penitentiaries of the United States with criminals, who have sacrificed character, society, and friends, for strong drink.

It has involved a waste of property to the amount of many millions of dollars.

It has burdened the country with a tax of millions of dollars for the support of its paupers.

It has falsied the industry, corrupted the morals, and degraded the character of Americans; proving itself more injurious to our country than war, or famine, or pestilence.

And what good thing has it done, or will it do, to counterbalance these deplorable and alarming effects? *Not One.* There is not a single redeeming quality. It neither prevents nor cures disease. It does not aid labour, nor promote domestic happiness. It adds nothing to national wealth or prosperity.

Public attention has been awakened—an experiment of a proposed remedy for intemperance has been successfully made, proving by actual demonstration, that the power to terminate the evils of intemperance rests with the people. More than one million and a half of persons have signed the pledge of total abstinence, and as many more are practising upon the principle without signing. Thousands of merchants, grocers, and inn-keepers, have discontinued the sale of ardent spirits; many distilleries have put out their fires; and everywhere the spirit of freedom from a degrading vice has been aroused. Light and love have awakened every effort, and they will accomplish the object. This object is distinctly announced to be *the total disuse of intoxicating drink in the United States and throughout the world.*

Parents, enlist your children on the side of total abstinence. It can do them no injury, and may save many of them from ruin. Let them adopt the sentiment of the following lines.

THE PLEDGE.

The pledge we sign, to drink no wine,
 Nor brandy red, to turn our head,
 Nor whiskey hot, that makes the sot,
 Nor fiery rum, to turn our home
 Into a hell where none could dwell:
 Yes—here we PLEDGE perpetual hate
 To all that can intoxicate.

FEMALES

Are most deeply interested in the success of the temperance reformation. As it advances, it dries up the fountain of woman's grief, and turns her tears of bitterness into tears of joy. Ladies, sign the temperance pledge, and thus cast your influence on the side of temperance. You can banish alcohol from the nursery, the sideboard, the social circle, and the festive hall. Mothers, sisters, wives, we entreat you to throw your gentle influence around society, to hold it back from the cup of death.

A REMEDY.

Let it be enacted that the expense of supporting all paupers who are made such through the sale of intoxicating liquors, shall be equally assessed upon the dealers in such liquors: let every man who takes out a license be required to give ample security for the payment of his share of the tax; and let the public authorities see that the destitute wives, widows and children of drunkards be well supported. This would put an end to nine-tenths of the grogeries; and the fewer the sellers became, the heavier would be the tax upon them. Friends of suffering humanity! why may not this plan be tried?

One cause of the prevalence of intemperance is the low price of wine, brandy, &c. Put down the spurious compounds, and the genuine will not be so constantly held out as a plausible temptation to young beginners. May not all who value health join in copying the following and obtaining signatures to it?

PETITION

To the Legislature of —

The subscribers respectfully represent,

That inferior whiskey, coloured by logwood, cochineal, &c., flavoured to resemble in taste the liquor imitated and impregnated with spirits of turpentine, cochilus indicus, oil of vitrol and other poisonous drugs, is sold throughout the country under the various names of wine, gin or brandy; and whereas this imposition is most injurious to health, and especially grievous to the sick to whom wine may be prescribed: we therefore pray your honourable body that such penalties may be imposed, by fine and imprisonment, against all who make or sell these or similar poisonous compounds, as may effectually secure the health of our citizens from such wicked and fraudulent practices. And your petitioners shall, &c. &c.

TETOTALISM.

The objection to beer, cider, &c. is that all Drunkards in the outset commence on such mild drinks, and thus form a taste for drinking which becomes habitual, and this habit becomes a second nature, leading slowly, it may be, but surely, to all the evils and horrors of drunkenness. Besides which, as temperance becomes popular, the strongest liquors are mixed with, and drunk as cider, beer, &c.

THE FRUITS !!

Some of the great advantages of the Temperance re-

formation are already realised. Witness the reduction in the rate of insurance on ships manned by Temperance Sailors, and the improved and comfortable condition of the sailors themselves, who, in the wet, cold, and hardships which they undergo, confirm the fact that liquor in all cases is not only unnecessary, but worse than useless.

Witness the THREE MILLIONS who have given the TEMPERANCE PLEDGE to Father Mathew in Ireland; where distilleries have been turned into school-houses, where, instead of crime, quarrelling, fighting, poverty and rags, now shine forth the Temperance blessings of peace, joy and comfort.

And many are the glorious results of Temperance, so many, that a volume might be filled with the glad tidings, which urge on the patriot and the philanthropist, and all good men to perseverance in this glorious work of reform.

THE TREE OF DISSIPATION.

The
sin of
drunkenness
expels reason,
drowns memory,
distempers the body,
defaces beauty, dimin-
ishes strength, corrupts
the blood, inflames the liver,
weakens the brain, turns men
into walking hospitals,—causes
internal, external, and incurable
wounds,—is a witch to the senses, a
devil to the soul, a thief to the pocket,
the beggar's companion, a wife's woe, and
children's sorrow,—makes man become
a beast and a self murderer,—who
drinks to others' good health,
and robs himself of his
own! Nor is this
all; it exposes

to the
Divine
DISPLEASURE HERE!
AND HEREAFTER TO
ETERNAL MISERY!!!
T h e

root of all is

DRUNKENNESS!!!!

MECHANICS AND WORKING-MEN.

THE ABLEST MEN WERE MECHANICS.

There never was a doctrine more untrue than the now almost obsolete one, derived from the false distinctions of monarchies, that *mechanic professions* are menial, and beneath the station of a true gentleman. The truth is, they are almost the only professions that have substance, and reality, and practical utility. The greatest men in the annals of the world, the men who have done most to enlighten it, and advance the prosperity and the liberties of the human race, have been mechanics. It is the *directness of mind*, the plain good sense their pursuits inculcate, which has led to those immortal discoveries that have enriched and ameliorated the condition of the whole human race. Name but an Arkwright, a Fulton, a Watt, a Franklin, a Whitney, &c., and where do you find their equal?

HINTS TO MECHANICS AND WORKMEN.

If you would avoid the diseases which your particular trades and work are liable to produce, attend to the following hints:

Keep, if possible, regular hours. Never suppose that you have done extra work, when you sit up till midnight.

Abstain from ardent spirits, cordials, and malt liquors. Let your drink be, like that of Franklin, when he was a printer—pure water.

Never use tobacco in any form. By chewing, smoking, or snuffing, you spend money which would help to clothe you, or would enable you, if single, to make a useful present to an aged mother or dependent sister; or, if married, to buy your wife a frock, or get books for your children. You also, by any of these filthy practices, injure your health; bringing on headache, gnawing at the stomach, low spirits, trembling of the limbs, and, at times, sleeplessness.

Be particular in preserving your skin clean, by regular washing of your hands, and face, and mouth, before each meal, and of your whole body at least once a week; and by combing and brushing the hair daily.

Always have, if possible, fresh air in the room in which you work, but so that you shall not be in a draft.

Take a short time in the morning, if possible, and always in the evening, or towards sundown, for placing your body in a natural posture, by standing erect, and exercising your chest and limbs by a walk where the air is the purest.

If confined in-doors, let your food consist, in a large proportion, of milk and bread, and well-boiled vegetables. Meat and fish ought to be used sparingly.

THE WORKING-MAN'S HOME.

Home! It marks the sacred spot to which the cares and tumult of the world do not reach; and where, except in cases of extreme depravity, its vices do not intrude. If there are gentle affections in the heart, they will break forth around the hearth-stone; if there is

an hour of tranquillity amidst perturbed life, it will be that which is spent with wife and children.

I would have the house of the working-man his most delightful resort. To be so, it should be pleasing, even in its outside. It is too common for people to think that because they are poor they must be slovenly and dirty. A little whitewash, a little paint, a little turfing, and a few days of labour about the vines and flowers, will serve to change the whole appearance of the humblest enclosure. Every body is more cheerful in a neat than in a disorderly room. When work is over, and everything in its place, the visiter is more welcome, the husband's look is brighter, and an affectionate glow spreads itself through the circle.

The common law has acknowledged the principle, that every man's house is his castle. It is true in more cases than one. Home is the citadel of all the virtues of the people. For by home we mean something more than one's house: it is the family that makes the home. It is the peculiar abode and domain of the wife; and this one circumstance marks it out as human, and as Christian. Sacred wedlock is the fountain not only of its pleasures, but of its moral excellence. The poorest man who has a virtuous, sensible, industrious and affectionate wife, is a man of wealth. Home is the abode of our children. Here they meet us with their smiles and their prattle. He who unfeignedly enjoys this, cannot be altogether corrupt; and the more we can make men enjoy it, the further do we remove them out of harm's way. No men, therefore, are better members of society, or more apt to become stable and wealthy citizens, than such as are well married and well settled.

HOME VS. TAVERNS.

The rivals of our Home are many and fearful. Among the direst is the drinking-place, whether known as porter-house, grog-shop, or tavern. The man who spends his evenings in these stygian fumes, soon grovels, and wallows away half his civilization. Where ought he to be, but by his own warm fireside, rewarding his wife for the solitary labours and vexations of the day, and receiving on his own part those cheap but invaluable pleasures, which are as much above the delirium and ribaldry of the bar-room, as the light of day is above the glimmer of a dipped-candle? I am no enemy to tavern-keepers. They are a useful class of men. Their offers of kindness to the stranger and the traveller, ought to be remembered and repaid. The worst effects of ill-conducted taverns are felt, not by the wayfaring-man, for whose behoof the inn is instituted, but by the throng of villagers and neighbours, who have, or who ought to have, homes of their own; who need no tavern, and who resort thither from idleness, from love of excitement, or from beastly appetite.

Ah! if that bar-room could tell the history of the drunkards who have dropped off one by one, how would the hideous revelation scare the very sot.

The tavern-haunter drinks till he feels himself half-ruined; he is wretched; he drinks to drown his wretchedness; he does drown it, and his soul along with it!

To young men, beginning life, especially to newly married men, the counsel is seasonable: *Reverence*

the Fireside. Admit no rival here. Let your chief joys be shared by her who has forsaken all other hearts and hopes for you; by those who must inherit honour or disgrace from your course of life. Shun the bar-room and the purlieus of intoxication. They are, to thousands, the avenues to infamy.

DENTISTRY,

ON THE AUTHORITY OF HUNTER, KÖCKER, HITCHCOCK, COMMON SENSE, AND OTHER DISTINGUISHED SURGEON DENTISTS.

The Teeth.—Attention to the cleansing of the teeth cannot be inculcated at too early an age. The neglect of brushing and washing the teeth is invariably attended with both disease and decay, which, by timely and daily ablutions, might have been avoided altogether. Those who have grown up in the omission of this salubrious habit, should lose not an instant in availing themselves of a practice so essential to general health and cleanliness. The extremes of heat and cold are injurious to the teeth; therefore, the water with which the teeth are cleansed should be what is termed lukewarm. They should be well but gently brushed, both night and morning; the brush should be neither extremely hard nor extremely soft, but should possess a medium quality. Should the gums bleed slightly during the operation, it will produce a salutary effect. The most effectual, and indeed the only means of keeping the teeth and gums in a firm and healthy state, is by using the brush daily. Those who possess good teeth should be careful to preserve them. When they are in good order, and free from tartar, the use of a soft brush once a day, with a little dentifrice occasionally, will be quite sufficient to keep them so; and with this the owner should rest satisfied.

Tooth Powder has afforded to quackery and imposture a spacious field for their operations, whereon the credulity of mankind has enabled them for years to reap a golden harvest. It is obvious to all who give themselves the trouble to think, that the simpler the ingredients of its composition, the more beneficial it is likely to prove. I know of none better or more wholesome, either for cleansing the teeth or for strengthening the gums, than cuttle-fish, prepared chalk, and orris-root, commingled together in equal quantities, which any one may procure separately from any respectable chemist, and mix himself.

Tartar.—This offensive substance, solely the effect of negligence and a want of cleanliness, proves ruinous to the teeth and injurious to health. Remove by

scrapping, taking care not to injure the enamel; at the same time press against the point of the tooth to keep it firm in its socket.

Filing should never be permitted unless to remove portions of rottenness that cannot otherwise be taken out. In its unavoidable destruction of the enamel, filing is highly pernicious.

Plugging cavities, either with gold or tinfoil, of good quality, should never be neglected. Carefully remove all rotten portions; thoroughly cleanse and dry by means of cotton; then introduce the metal gradually, pressing it into all parts of the cavity with as much firmness as possible, until it becomes a solid mass with the exterior surface, even and smooth.

Tobacco Juice, whether from smoking or chewing, stains the teeth a permanent filthy yellow, and undermines the enamel.

Instruments are required of such various sizes, shapes, &c., in most operations, as make the services of a dentist advisable, if not indispensable. One of the evil consequences of neglect.

Children will be saved much future suffering, mortification and expense, by having their teeth frequently looked to, and by insisting on the easily-formed habit of washing and cleansing the teeth after every meal.

Tooth Powder.—Many preparations, particularly charcoal, are sure to wear away the enamel, and are therefore pernicious. Use 1 oz. orris-root, 2 oz. prepared chalk, one fourth oz. magnesia. Wild-cherry-tree bark is an excellent dentifrice. When once clean, teeth may easily be kept so by simple water and a brush.

Toothache proceeding from the nerve, may be permanently cured by cauterizing or burning the nerve. This is done by a wire filed to the size of the exposed surface of the nerve, bent at the end in a suitable direction. The saliva must be discharged, and the cavity dried by cotton. Then, with the extremity of the wire held in a candle until it acquires a white heat, carefully but rapidly and slightly touch the nerve. It may be necessary to repeat it. If the wire is merely red hot it is painful, but if heated to a white heat the pain is scarcely perceptible.

Burnt Alun, kreosote, oil of cloves, laudanum, poultice of ginger, laudanum and vinegar, applied to the face; or mustard plaster, are sometimes of service in toothache; and brandy and salt will remove inflammation and soreness of the gums.

THE HAIR.

REVISED BY J. D. MOORE.

Its Proper Management.—Under the ordinary circumstances of health, in conjunction with temperance and regular exercise, the only safe and effectual means of preserving the hair and of promoting its growth and beauty, is the frequent use of the comb and brush, and regular ablution.

It will be readily perceived, by a reference to the structure of the hair, that whatever has a tendency to

impede the passage of the fluids by which it is nourished, from the root along the tube in the centre of each hair, must necessarily prevent its proper growth, render it thin, and deprive it of its soft and glossy appearance. There can be little doubt that this is the effect, to a certain extent, of the practice of twisting the hair from its natural position, and of plaiting or firmly braiding it. The injurious consequences of such

modes of dressing the hair can only be obviated by a daily resort to the comb and a hard brush, which, by disentangling, restores it to its natural direction, and, freeing it from every restraint, enables it to receive a due supply of its appropriate fluids. The growth of the hair is not, however, always impeded by artificial means: this may result, also, from allowing it to become entangled and matted together—a condition to which it is extremely liable from its peculiar form. Hence, under all circumstances, frequently combing and brushing it through its whole length, is absolutely necessary to its proper preservation.

Independent of the good effects of these operations in rendering the hair pervious to the fluids which rise from its roots, they facilitate its development also, by freeing the scalp from accidental impurities, facilitating the circulation through its vessels, and thus enabling the hair to perform freely its functions.

Another means of promoting the growth of this structure and insuring its permanency, is by frequently cutting it. It is in early life, particularly, that frequent cutting will be found highly advantageous.

When the hair becomes thin and irregular, or its beauty is otherwise impaired, we know nothing better calculated to restore its proper growth than cutting it short.

In children, keeping the hair short is a circumstance of no little importance, and should not, from any light consideration, be neglected. Their health is prejudiced by a contrary practice. Nothing is more common than to see a luxuriant head of hair accompanied in children by paleness of complexion, weak eyes, and frequent complaints of headache. The following excellent remarks in a little work entitled "Advice to Young Mothers—by a Grandmother," are recommended to the attentive perusal of every parent.

"The hair in children should be cut short until they are eight or nine years old—as the cooler the head can be kept, the less danger there is of many maladies peculiar to that part of the body, especially water on the brain. Besides, there is good reason for believing, that children who have a great quantity of hair, are those most liable to eruptions, as scald head, &c. It is at least certain, that in them, eruptions are very difficult to remove. The trouble, also, of keeping long hair sufficiently clean, and the length of time necessary for this purpose, is often a cause of much ill humour and many cross words between children and their attendants, which it would be better to avoid.

"Mothers whose vanity may be alarmed lest repeated cutting the hair for so many years should make it coarse, may be assured they have no cause for this apprehension, provided the hair be kept constantly brushed."

When there is any tendency to sores or eruptions on the head of children, fine combs are very apt to promote them. There is no doubt that the heads of young persons which are never touched by them, may be preserved much cleaner by strict attention, than such as are scratched and scraped every day. If any dirt appears on a child's head, which a brush will not remove, that particular part should be rubbed with a towel and soap and water; but in general, the brush will be found quite sufficient to keep it perfectly clean. The seldomer, indeed, a fine comb is applied to the head, the better: when, however, those of ivory, tortoise shell, or bone, are used, the greatest care is necessary lest they wound the skin and produce a sore, or, by unduly irritating it, augment the production of the scurf they are often intended to remove.

Washing Hair.—The beauty and permanence of the hair are best promoted by the strictest cleanliness. To prevent its becoming greasy and dirty, it ought to be washed frequently with soap and water. Soft and slightly warm water is best.

Objections are made by some to wetting the hair—but the prejudice against the practice is absurd. No possible injury, but, on the contrary, much good will result from frequent washing of the head.

The females of the South Sea Islands, remarkable for their fine long hair, promote its silky gloss and beauty by regular and frequent washing.

Hygiene des Dames, approving the practice of washing, observes, in regard to the length of the hair of females, that as the most beautiful hair is the most difficult to keep clean, it is precisely this sort which requires to be washed often and carefully, and the bath is recommended as the most convenient means of doing this. Besides, says the author, the finest gloss is imparted by the water, provided the hair be quickly dried and immediately combed and brushed.

Headaches complained of by females are often occasioned by a deficiency of moisture in the hair, by which the comb or brush is prevented from fully detaching the scales that form upon the scalp and clog up the pores destined to the passage of the perspiration.

Husbands finding Fault.—Some men make their wives very miserable by a thoughtless habit of finding fault with everything which comes in their way. The man who heedlessly finds fault on every occasion, only lays the foundation for his own sorrow, for he takes away an important motive which actuates the wife to faithfulness and pains-taking; and she must be more than a common woman, who, in the face of repeated fault-finding, can find a heart long to exert herself, only to receive again the same reward.

Quarrels.—One of the commonest and most foolish things in the world, is to quarrel, no matter with whom, man, woman, or child; or upon what pretence, provocation, or occasion whatever. There is no kind of necessity in it, and no species or degree of benefit to be gained by it. No man ever fails to think less of himself after than he did before one: it degrades him in his own eyes and in the eyes of others; and, what is worse, blunts his sensibility to disgrace on the one hand, and increases the power of passionate irritability on the other.

THE WORLD:

ITS EXTENT AND POPULATION.

Divisions of the Globe, in the Order of their Populousness, with their Population to a Square Mile.

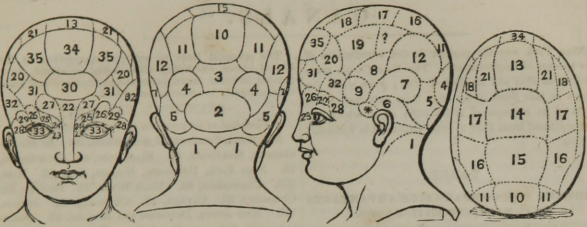
	Pop. to a Sq. Mile.
Europe	65
Asia	28
Africa	6
North America	4
South America	2

ORDER OF POPULATION.

	Population.
Asia	500,000,000
Europe	215,000,000
Africa	100,000,000
North America	25,000,000
South America	14,000,000

ORDER OF EXTENT.

	Sq. Miles.
Asia	16,000,000
Africa	12,000,000
North America	9,000,000
South America	6,500,000
Europe	3,500,000



PHRENOLOGICAL INDEX.

FEELINGS,*Or Affective Faculties.*

- | | |
|----------------------|---|
| PROPERTIES. | * Alimentiveness, appetite for food. |
| | 1. AMATIVENESS, produces Sexual Love, Desire; Physical Love. |
| | 2. PHILOPROGENITIVENESS, Love of Children, and Young Beings. |
| | 3. CONCENTRATIVENESS — continues the Mind on Emotion or Ideas. |
| | 4. ADHESIVENESS, Friendship, Sociability; Attachment generally. |
| | 5. COMBATIVENESS, Courage, Opposition, Intrepidity, Quarrelsomeness. |
| | 6. DESTRUCTIVENESS, Desire to Destroy, Torment; Harshness, Cruelty. |
| | 7. SECRETIVENESS, Concealment, Prudence, Cunning, Hypocrisy. |
| | 8. ACQUISITIVENESS, Desire to acquire Property; Avarice, Selfishness. |
| SENTIMENTS. | 9. CONSTRUCTIVENESS, Mechanical Genius, desire to build. |
| | 10. SELF-ESTEEM, Self-respect, Personal Dignity, Pride, Haughtiness. |
| | 11. APPROBATIVENESS, Thirst for Praise, Fame, or Glory; Ambition, Vanity. |
| | 12. CAUTIOUSNESS, Circumspection, Timidity, Fear, Despondency. |
| | 13. BENEVOLENCE, Universal Charity, Mildness of Disposition. |
| | 14. VENERATION, Reverence, Superstitious Adoration, Bigotry. |
| | 15. FIRMNESS, Determination, Perseverance, Obstinacy, Resolution. |
| | 16. CONSCIENTIOUSNESS, Love of Truth, Sense of Justice, Duty. |
| | 17. HOPE, Expects future good; Cherishes Faith, Love of Scheming. |
| SUPERIOR SENTIMENTS. | 18. WONDER, Desire of Novelty, Belief in the Supernatural. |
| | 19. IDEALITY, Love of the Beautiful, or Excellent, Poetic Feeling. |
| | 20. MIRTHFULNESS, Wit, Humour, Glee, Love of the Ludicrous. |
| | 21. IMITATION, Expression in Arts, or Action; Mimicry. |

REFLECT. PERCEIVE OBJECTS AND THEIR RELATIONS.

INTELLECT,*Or Knowing and Reflecting Faculties.*

- | | |
|--|--|
| REFLECT. PERCEIVE OBJECTS AND THEIR RELATIONS. | 22. INDIVIDUALITY — observes Existences, Simple Facts. |
| | 23. FORM, observe Configuration and the Shape of Bodies generally. |
| | 24. SIZE — gives the Idea of Space, Distance, Dimension. |
| | 25. WEIGHT — perceives Momentum, Resistance, Equilibrium. |
| | 26. COLOURING — gives perception of Colours, and their Harmonies. |
| | 27. LOCALITY — gives the idea of Relative Position, Place. |
| | 28. NUMBER, Talent for Calculation, quickness in Figures. |
| | 29. ORDER, Communicates the Love of Physical Arrangement. |
| | 30. EVENTUALITY — observes and remembers Occurrences and Events. |
| | 31. TIME — perceives Duration in Nature, time in Music. |
| | 32. TUNE, Sense of Musical Harmony, Melody. |
| | 33. LANGUAGE, Verbal Memory, Fluency in Speech or Writing. |
| | 34. COMPARISON — discovers Analogies and Differences. |
| | 35. CAUSALITY — traces the Relation of Cause and Effect. |

Memory, is merely a degree of activity of the knowing and reflecting organs, each organ enabling the mind to recall the impressions which it served at first to receive.

Judgment is the decision of 34 & 35 upon feelings and ideas furnished by the other faculties.

The faculties, in themselves, are mere instincts; the moral sentiments and intellect being higher than the animal propensities. Every faculty is good in itself, but all are liable to abuse: their operations are right only when they act in harmony with each other, enlightened intellect and moral sentiment holding the supremacy.

Other things being equal, the size of the brain determines the strength of the mind; though if the temperament be active, the same volume of brain will produce proportionably greater mental energy. The size of each organ measures the power of that faculty which is exercised by means of it. Each organ desires its own active gratification in proportion to its development; the larger organs controlling the smaller. Firmness, Concentrativeness, and Secretiveness, act through the other faculties.

Note.—Figures may be used in the margin to denote the relative sizes of the organs in individuals. Scale from 1 to 20:—organs marked below 8, small; from 8 to 12, moderate; from 12 to 16, full; from 16 to 20, large.

Note.—The subject of Phrenology has awakened so much attention for a few years past, that it is thought consistent with the plan of this work, to devote one page to a general and comprehensive view of the whole matter, which we do in the above synopsis, without designing to express any opinion upon the relative merits or demerits of the science.

CANALS.

New York was the pioneer in the introduction of this species of improvement. The Erie Canal, commenced in 1817 and finished in 1825; since when the canals in this State alone have been extended to 950 miles at an expense of 20,000,000; upon which the tolls collected from 1829 to 1836, amounted to 9,983,637 dollars.

TABLE,

SHOWING THE COMPARATIVE ADVANTAGES
OF CANALS AND RAIL-ROADS.

Speed per hour.	Daily duration of labour.	Daily dist. trav. by a five draught 1220s.	Load for 1 horse on a canal.	Load for 1 horse on a rail-road.	Horses to draw the load of one horse on a rail-road.
ms.	h.m.	miles.	tons.	tons.	horses.
3½	5 42	20	9.8	9 8	1
4	5	20	7 5	9 75	1.3
5	4	20	4.8	9 64	2 08
6	3 20	20	3.33	9 53	2 36
7	2 51	20	2 43	9 42	3 67
8	2 30	20	1.87	9 31	5 31
9	2 13	20	1.48	9 22	6 2
10	2	20	1.2	9 68	7 2
11	1 48	20	1	9	9

The splendid lines of artificial navigation in the United States, exceeding 4000 miles in extent, have created internal trade, promoted agriculture and business generally to an immense extent.

PRINCIPAL CANALS,

Finished or in progress in the United States.

In Maine, Cumberland and Oxford, 20. *In Massachusetts,* Middlesex, 27. Blackstone, 45. Farmington, 78. *New York,* Delaware, Hudson, &c., 82. Erie, 363. Champlain, 63. Black River, 76. Oswego, 38. Chenango, 96. Cayuga, 20. Chemung, 23. Morris, 101. *New Jersey,* Delaware and Raritan, 43. *Pennsylvania,* Delaware Canal, 60. Lehigh, 66. Schuylkill, 108. Little Schuylkill, 20. *Pennsylvania,* 312. Susquehanna, 39. Western Branch, 66. Northern Branch, 76. Beaver, 30. French Creek, 46. *Pennsylvania* and Ohio, 82. Sandy and Beaver, 73. *Delaware and Maryland,* Chesapeake and Delaware Canal, 14. *Maryland,* Chesapeake and Ohio, 186. *Virginia and North Carolina,* Dismal Swamp, 23. *Virginia,* James' River, 150. *South Carolina,* Santee, 22. *Georgia,* Savannah and Altamaha, 60. Brunswick, 12. *Alabama,* Muscle Shoals, 37. *Louisiana,* Lafourche, 85. *Ohio,* Miami, 265. *Ohio and Erie,* 306. *Wabash and Erie,* 110. *Indiana,* White Water, 76. *Illinois and Chicago,* 96.

RAIL-ROADS.

Rail-Roads, in the facilities they furnish of transporting passengers, produce, and country merchandise, as well as in the immense amount of employment furnished to many thousand of labourers, mechanics, and others, are justly considered among the greatest improvements of the age.

Profits.—On eight rail-roads in Massachusetts in 1840, total receipts were 1,191,710 dollars; expenses, 634,786 dollars, leaving a surplus of 656,924 dollars.

TABLE,

SHOWING THE COMPARATIVE ADVANTAGES
OF ANIMAL AND MECHANICAL LABOUR.

Speed per hour.	Daily animal labour.	Daily mechanical labour.	Tons conveyed by 5 horses or 1 locomotive.	Daily dist. by horses.	Daily distance of locomotion.	For labour of 1 engine.
ms.	h. m.	hours	tons.	ms.	miles	horses.
2	10	24	50	20	48	12
3	6 40	24	49 33	20	72	18
3½	5 42	24	49	20	84	21
4	5	24	48.75	20	96	24
5	4	24	48.25	20	120	30
6	3 20	24	47.66	20	144	36
7	2 51	24	47.1	20	168	42
8	2 30	24	46.55	20	192	48
9	2 13	24	46	20	216	54
10	2	24	45.5	20	240	60
11	1 48	24	45	20	264	66

PRINCIPAL RAIL-ROADS,

Finished or in progress in the U. States, connecting,

Boston and Newburyport, 33 miles; Boston and Lowell, 26; Boston and Worcester, 160; Providence and Stonington, 47; Norwich and Worcester, 58; Hartford and New Haven, 40; Utica and Schenectady, 84; Troy and Ballston, 25; Mohawk and Hudson, 16; Saratoga and Schenectady, 23; Utica and Syracuse, 50; Auburn and Syracuse, 25; Lockport and Niagara Falls, 20; Buffalo and Niagara Falls, 23; Rochester and Attica, 47; Ithaca and Owego, 29; New York and Erie, 340; Jersey City and Paterson, 15; Jersey City and Trenton, 58; Camden and Amboy, 61; Philadelphia and Trenton, 26; Philadelphia and Columbia, 82; Philadelphia and Baltimore, 93; Philadelphia and Norristown, 17; Philadelphia and Reading, 56; Danville and Pottsville, 45; Lancaster and Harrisburg, 37; Westchester, 9; Baltimore and Susquehanna, 70; Williamsport and Elmira, 74; Reading and Port Clinton, 20; Little Schuylkill, 20; Harrisburg and Chambersburg, 49; Wrightsville and Gettysburg, 42; Newcastle and Frenchtown, 17; Baltimore and Ohio, 60; Baltimore and Washington, 40; Winchester and Harper's Ferry, 30; Richmond and Potomac, 75; Richmond and Petersburg, 21; Petersburg and Blakely, 60; Portsmouth and Wildon, 80; Hickford and Gaston, 18; Raleigh and Gaston, 86; Wilmington and Halifax, 161; Charleston and Hamburg, 135; Savannah and Macon, 200; Macon and Forsyth, 25; Augusta and Decatur, 160; Tusculumbia and Decatur, 45; Montgomery and West Point, 85; Vicksburg and Jackson, 54; Jackson and Brandon, 8; Grand Gulf, 8; New Orleans and Nashville, 500; Clinton and Port Hudson, 28; St. Francisville and Woodville, 28; Memphis and St. L. 18; Dayton and Sandusky, 153; Louisville and Lexington, 90; Detroit and St. Josephs, 180; Detroit and Pontiac, 30; Toledo and Marshall, 90; Madison and Lafayette, 150; Lawrenceburg and Indianapolis, 90.

RELIGION.

GENERAL ENUMERATION.

Christians, - - - -	260,000,000
Jews, - - - -	4,000,000
Mohammedans, - - -	96,000,000
Idolaters of all sorts, - - -	500,000,000
Total population of the world, - - -	860,000,000

PRINCIPAL RELIGIOUS DENOMINATIONS IN THE UNITED STATES.

Baptists, - - - -	492,496
Methodists, - - - -	850,000
Protestant do., - - - -	50,000
Presbyterians, - - - -	358,083
Congregationalists, - - - -	160,000
Catholics, (population), - - - -	1,300,000
Episcopalians, do., - - - -	600,000
Universalists, do., - - - -	600,000
Lutherans, - - - -	63,000
Dutch Reformed, - - - -	22,550
Christians, - - - -	150,000
German Reformed, - - - -	30,000
Unitarians, - - - -	180,000
Mennonites, - - - -	30,000
Friends, - - - -	100,000
Jews, - - - -	15,000
Moravians, - - - -	5,800
Mormonists, - - - -	65,000
Shakers, - - - -	6,000
New Jerusalem, - - - -	11,000

Making together, 4,859,030 professors of religion, and allowing three or four among the family or friends of each, and the number so ascertained will include very near, the entire population of the United States as professors, friends, or believers in the eternal truths of Divine Revelation.

It has been truly observed that the Christian is the only religion which will bear the test of a rational investigation; that it is the only system which can pretend to a divine origin, and the only one to which mankind can look for a remedy against the various moral evils which prevail over the world.

THE ATHEIST.

The assaults of reckless men, the cavilling of sceptics, the sneers of the scoffer, from the most powerful in times past down to the miserable atheist of the present day, have accomplished nothing. Their denunciations, and revilings, and labours, have all resulted in creating no good, in advancing no interest, in defending, or comforting, or elevating none; in administering to the wants, the sufferings, or hopes of no human being. Their labours, like their minds, are a blank—a blank as cold and comfortless, as destitute of good here or hope hereafter; a blank as dark and appalling as the void to which they would drag down and degrade the eternal and immortal soul.

THE CHRISTIAN.

How wonderful the contrast religion presents!! But without adverting to the fruits of Christian love and enterprise, witness throughout the civilized world, the noon-daylight of Christianity, every where abounding in proportion as the human race rises in the scale of intelligence and civilization; and without denying the

evils of bigotry, or the hypocrisy of pretenders, alike inimical to true religion—without appealing to the long line of heroes, statesmen, and philosophers; and the host of great intellects, who have made religion the study of their lives, and sealed it with their deaths; without enquiring if men are so bad with religion, how much worse would they be without any—in short, without the multitude of reasons that urge men to prefer the hope of immortal life, to the death of a brute, let it be asked, *Is it not true* that the firm believers in the Gospel have a great advantage over all others?—for this simple reason, that if true, they will have their reward hereafter; and if there be no hereafter, they can be but with the infidel in his eternal sleep, having had the assistance of an exalted hope through life.

Among the great multitude of the wise and good who have recorded their testimony in behalf of Christianity, the American citizen may proudly dwell on the memory of WASHINGTON. A model of true greatness; through his whole life he exhibited an example, in all the relations of life, political and social, public and private, which challenges the admiration of the world. In his FAREWELL ADDRESS he says—

“Of all the dispositions and habits which lead to political prosperity, religion and morality are indispensable supports. In vain would that man claim the tribute of patriotism, who should labour to subvert these great pillars of human happiness, these firmest props of the duties of men and citizens. The mere politician, equally with the pious man, ought to respect and to cherish them. A volume could not trace all their connexions with private and public felicity.

“Tis substantially true, that virtue or morality is a necessary spring of popular government. The rule indeed extends with more or less force to every species of free government. Who that is a sincere friend to it can look with indifference upon attempts to shake the foundation of the fabric?”

GEORGE WASHINGTON.

THE CHRISTIAN WORLD.

This is the title of a periodical published in Philadelphia at one dollar and twenty-five cents per annum, without advocating any particular sect. It is devoted to the advancement of Christianity—“Bible Christianity in its essential, peculiar, and incomparable glory.” Edited by T. H. Stockton.

INFLUENCE OF WOMEN.

BY JUDGE HOPKINSON.

If men hold the political power of society, women have mainly in their hands the more important moral power. There cannot be a moral community where they are licentious; there cannot be a refined society where they are neglected and ignorant. Upon them depend the earliest education and first impressions of their children. They regulate, or materially influence, the principles, opinions and manners of their husbands and their sons. Thus the sound and healthful state of society depends on them. It is a remarkable historical fact, that the wife of Oliver Cromwell endeavoured to persuade him to recall the exiled king, and that all his children save one were loyal. We must believe they derived their feelings and opinions from their mother. Alfred, one of the most extraordinary men of any age, who rescued his country from her enemies by his courage, and by his wisdom and energy rescued her from extreme barbarism to a high degree of civilization, in his youth was given to idleness and pleasure. His mother roused in him the ambition and virtue that has made him the admiration of mankind for a thousand years. Napoleon said that to the manner in which his mother formed him at an early age, he principally owed his subsequent elevation. It was his opinion that the future good or bad conduct of a child depends upon the mother.

Mothers, while you are proud of this distinction, remember the responsibility it imposes on you. BE WORTHY OF IT.

The list of great names might have been swelled by that of our WASHINGTON, who has paid so beautiful a tribute to the memory of her who formed his youthful mind, and by those of many thousands of others who have ascribed to the affectionate care and counsel of mothers all their virtues, their distinction and honours.

But recently the eloquent and popular O'Connell thus publicly testified:

"I wept over the grave of my sainted mother, who early instructed and brought up my infant mind to the possibility of failure, but the impossibility that the lessons I received could tarnish the morals or virtues of her son; and I do sincerely believe that, when at her last expiring breath her sainted soul poured forth a blessing on my head, whatever success I have had through life was owing to the efficacy of her last pleasing though melancholy lesson."

THE PRECIOUS PEARL.

Religion in a female secures all her interests. It graces her character, promotes her peace, endears her friendship, secures esteem, and adds a dignity and worth indescribable to all her deeds. How pleasant, when the absent husband can think of home, and reflect that angels watch the place! When about to leave her a widow, how consoling, if her character is such, that she can lean on the widow's God, and put her children under the guardianship of Him, who is the

father of the fatherless! Then he quits the world calm and happy, supported by the hope he shall meet them all in heaven.

A HINT.

It is not the money earned that makes a man wealthy so much as what he saves from his earnings. A good and prudent husband makes a deposit of the fruits of his labour with his best friend: and if that friend be not true to him, what has he to hope? If he dare not place confidence in the companion of his bosom, where is he to place it? A wife acts not for herself only, but she is the agent of many she loves, and she is bound to act for their good, and not for her own gratification. Her husband's good is the end to which she should aim—his approbation and love is her reward.

THE MOTHER'S DUTY.

Important as are schools, and invaluable as learning may be, they are nothing, nay, worse than nothing, unless right habits are formed at home. Without a proper training of the mind in early childhood, the learning of after life may only serve to direct bad habits to evil purposes, and lead the way to greater wickedness and crime.

All who have the care of children, or who feel an interest in their welfare, can do them no greater good, nor society a greater blessing, than by aiding in the correction of bad, and the formation of good, habits.

Habits in youth are easily formed, and the hand that aids in forming them is doubly blessed. Let all those who love little children—let mothers, especially, watch unceasingly, and carefully nip in the bud the slightest propensity in a child to exercise cruelty of any kind, or upon any object, and early create an habitual abhorrence of dram-drinking, theft, and hypocrisy. Assiduously cultivate a love of truth, of industry, frugality and order; observing that though children may be governed too little or too much, they can never be governed too well.

See "*HABITS*," page 39.

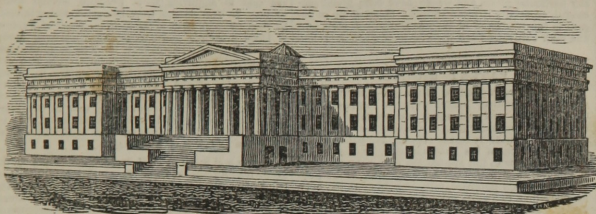
JOHN QUINCY ADAMS.

Whatever may be the views entertained towards Mr. Adams as a politician, it is conceded by all acquainted with his private character, that he is a man of high-toned morals, and of the strictest integrity. The mother's character is shown in the following extract from a letter, written to her son, then eleven years of age, who was residing with his father at Paris.

June, 1778.

My dear son,—The most amiable and most useful disposition in a young mind, is diffidence of itself; and this should lead you to seek advice and instruction. Improve your understanding by acquiring useful knowledge—and virtue, such as will render you an ornament to society, an honour to your country, and a blessing to your parents. Great learning and superior abilities, should you ever possess them, will be of little value and small estimation, unless virtue, honour, truth and integrity are added to them. Adhere to those religious sentiments and principles which were early instilled into your mind, and remember that you are accountable to your Maker for your words and actions. * * *

The inadvertency and heedlessness of youth require line upon line, and precept upon precept; and, when enforced by the joint efforts of both parents, will, I hope, have a due influence upon your conduct; for, dear as you are to me, I would much rather you should have found your grave in the ocean you have crossed, or that an untimely death-crop you in your infant years, than see you an immoral, profligate, or graceless child.



Patent Office, Washington City.

The principal Hall is 273 feet long, 63 feet wide, and 30 feet high.

A *National Gallery* in the Patent Office is open for the reception of unpatented models and specimens of Manufactures and Agriculture. Preparation will be made to exhibit articles deposited, to the best advantage, and every attention bestowed to protect them in glass cases, from injury or loss.

Few, very few, are aware of the progress of the arts in the United States, and hence the scepticism as to the ability we possess to supply our own wants. Our factories, scattered over a widely extended surface, are seen by travellers only, and they can visit but few, in traversing the leading routes. Unlike the concentrated establishments in Europe, where steam power is used, here, factories and work-shops are found in retired spots, where streams (a valuable portion of national capital) give the most economical—the hydraulic power.

Annual fairs, in many places, have done much good and excited a laudable emulation; but these have been limited to a short duration, and designed for citizens in their immediate vicinity. It is now proposed to establish, at the Seat of Government, a *National Gallery*, to remain a perpetual exhibition of the progress and improvement of the arts in the United States. Here the most beautiful specimens of the genius and industry of the nation will be found; and what American can visit the Gallery, and not be still prouder of his country, and feel that while we are *free*, we are also *independent*.

The rooms, though spacious, will not admit of cumbersome articles; samples and specimens, similar to those exhibited at the principal Fairs, will be thankfully received. I would observe, the Patent Office is fire-proof, and guarded by a careful watch.

The Diplomatic Corps, and the Navy, are using much effort to transmit to the Patent Office the most valuable exotics, while from the agriculturists of this country are expected the best specimens of indigenous seeds.

During the session of Congress of 1839–40, an act was passed authorizing the Commissioner of Patents to collect statistics, and, in various other modes, to promote the agricultural interest of the United States.

Deeply impressed with the importance of this subject, and regarding it as the commencement of a system, which, if properly carried out, will confer incal-

culable benefits on our common country, the Commissioner embraces an early opportunity to invite co-operation in introducing foreign Seeds which are rare and valuable. Public vessels are fully authorized to receive specimens. Reasonable freight, however, will be paid by the Office, for shipment in private vessels.

An exhibition of the spike of the different grains, indigenous and exotic, is contemplated in the new Patent Office; hence the importance of sending, if possible, a specimen of the original stalk with the grain attached.

Directions for putting up and transmitting Seeds.

With a view to the transmission of seeds from distant countries, the first object of care is to obtain seeds that are fully ripe, and in a sound and healthy state.

Those seeds that are not dry when gathered, should be rendered so by exposure to the air, in the shade.

When dry, the seeds should be put into bags of common brown paper. A portion of the seeds may also be put in other kinds of paper. Those that most effectually exclude air and moisture are the best for that purpose. It would be proper, also, to enclose some of the seeds in paper or cloth that has been steeped in melted beeswax. Seeds collected in a moist country, or season, may be packed in charcoal.

After being put up according to any of these modes, the seeds should be enclosed in a box, which should be covered with pitch, to prevent them from damp, insects, and mice. They should be kept in a cool, airy, and dry situation; not in the hold of the ship.

The oily seeds soonest lose their germinating faculty. They should be put in a box with sandy earth, in the following manner: first, about two inches of earth at the bottom; into this the seeds should be placed at distances proportionate to their size; on these another layer of earth about an inch thick; and then another layer of seeds: and so on, with alternate layers of earth and seeds until the box is filled within about a foot of the top, which space should be filled with sand; taking care that the earth and sand be well put in, that the seeds may not get out of place. The box should then be covered with a close net-work of cord, well pitched, or with split hoops or laths well pitched, so as to admit the air without exposing the contents of the box to be disturbed by mice or accident. The seeds thus put up will germinate during their passage, and will be in a state to be planted immediately on their arrival. It would be well, also, to enclose some of them (each seed separately) in a coat of beeswax, and afterwards pack them in a box covered with pitch.

It is not intended, however, by these instructions, to exclude the adoption of any other modes of putting up and transmitting seeds and plants, which are in use in

any particular place, and which have been found successful, especially if more simple. Suggestions in regard to the treatment of the plants during the voyage, and their cultivation and use afterwards, are desirable.

PATENT RIGHTS.

1. Patents are granted for 14 years, for any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used by others before. No patent is invalid by reason of the purchase, sale, or use (of the invention) prior to the application for a patent, except on proof of abandonment of such invention to the public, or that such purchase, sale, or public use has been for more than two years prior to such application for a patent. 2. Joint inventors can only obtain a joint patent. 3. An inventor may assign his right, all or part, before the patent is obtained, the assignment being first recorded. 4. The administrator or executor of a deceased inventor can secure a patent for the heirs. 5. All fees go into the Treasury; and for a patent, thirty dollars must be paid in advance — two thirds to be repaid in case application is withdrawn. 6. No answers

are sent to enquiries about previous similar discoveries. 7. The petition must be signed, and witnessed by two, and addressed to the Commissioner of Patents. 8. Plain drawings and specifications must be made, witnessed, and duplicates sent. 9. The particular specification claimed must be pointed out. 10. The model must be sent or left as below, with the inventor's name durably affixed. 11. The fees must be remitted in coin or by certificate of deposit. 12. Persons having business with the Patent Office, will be furnished with the printed laws, directions, forms, rules, &c., on application. 13. Communications with the Patent Office are by law free of postage.

Models and Specimens, if deposited with any of the following Agents, will be forwarded to the Patent Office free of expense: Collectors at Portsmouth, N. H.; Portland, Me.; Burlington, Vt.; Providence, R. I.; Surveyor at Hartford, Conn.; Collectors at Philadelphia, Pa.; Baltimore, Md.; Richmond, Va.; Charleston, S. C.; Savannah, Ga.; New Orleans, La.; Detroit, Mich.; Buffalo, N. Y.; Surveyor at St. Louis, Mo.; Collector at Cleveland, Ohio; Surveyors at Pittsburgh, Pa.; Cincinnati, Ohio; Louisville, Ky.; R. H. Eddy, Agent, Boston, Mass.; David Gardiner, Agent, Custom House, N. Y.

EMIGRANTS.

Rich lands abound to such an extent, in almost every variety of climate and situation, in our country, and are so easily obtained, that no advice, for selecting, can be necessary. Where there is so much to choose from, ordinary intelligence can hardly go amiss. A few hundred dollars, health, a disposition to labour and submit to privations, are all that is required to insure real wealth and independence.

A Log Cabin is made of round, straight logs, about a foot in diameter, lying on each other and notched in at the corners, the crevices stopped with slips of wood and mortar made of clay, with a roof of rafters covered with bark, &c. This suffices till larger and better accommodations can be made.

Clearing next follows. Fell the trees early in the summer. Cut large ones first; let them fall in such direction as will enable you to fell the largest number of small ones on or along side them; and fell all parallel as near as possible, for convenience in rolling together. Lop the limbs of large trees; cut the small ones into suitable lengths to haul on to the large. By this process two men may heap and burn most of the timber, without a team. Ne'er chop or draw large trees till reduced by fire. Fire the heaps the next May, if dry; if not, wait till July or August. Heating the soil so destroys the green roots, and the ashes are so beneficial that a good crop of wheat or Indian corn may be had without ploughing or manuring. Plough shallow in autumn, cross plough deeper in the spring, harrow well, and be sure of golden crops. Winter chopping is sometimes preferred, and the burning done in the following August, if a dry season. See *Public Lands—Agriculture—Health, &c.*

ADVICE TO WESTERN SETTLERS.

The following good common sense directions are by the Rev. T. Flint.

"The most affectionate counsel we could give an immigrant, after an acquaintance with all districts of the western country, of sixteen years, and after having seen and felt no small share of all we have attempted to record, would be to regard the salubrity of the spot selected, as a consideration of more importance than its fertility, or vicinity to a market." The advice to have a lancet, and learn how to open a vein, is good; and that to have a small and well labelled and well supplied medicine chest, is not amiss, connected with

what follows, viz. "To be, after all, very cautious about either taking or administering its contents, reserving them for emergencies, and for a choice of evils; to depend for health on temperance, moderation in all things, a careful conformity, in food and dress, to circumstances and the climate; and, above all, let him observe a rigid and undeviating abstinence from that loathsome and murderous western poison — whiskey — which may be pronounced the prevalent miasm of the country. Let every immigrant learn the mystery, and provide the materials, to make good beer. Let every immigrant, during the season of acclimation, especially the sultry months, take medicine by way of prevention, twice or thrice, with abstinence from labour a day or two afterwards."

We should say, let the immigrant, when he first experiences unpleasant bodily feelings in hot weather, such as headache, with loss of appetite, fast and rest from labour for a few days, and he will avoid sickness, and prevent the necessity of taking any physic at all. "Let him," continues the author, "have a Bible for a constant counsellor, and a few good books for instruction and amusement. Let him have the dignity and good sense to train his family religiously, and not to be blown about by every wind of doctrine, in religion, politics, or opinions. Let his rifle rest, and let the game, unless it come in his way, live on. Let him cultivate a garden of choice fruit, as well as a fine orchard. Let him keep bees, for their management unites pleasure and profit. Let him prepare for silk-making on a small and gradual scale. Let him cultivate grapes by way of experiment. Let him banish unreal wants and learn the master secret of self-possession, and be content with such things as he has, aware that every position in life has advantages and trials. Let him assure himself that if an independent farmer cannot be happy, no man can. Let him magnify his calling, respect himself, envy no one, and raise to the Author of all good, constant aspirations of thankfulness, as he eats the bread of peace and privacy."

UNITED STATES.

ARMY.

Army of the United States.—A Secretary of War; three Brigadier Generals; Qr. Master General; Paymaster General; Surgeon General; Chief Engineer. The whole army consists of four regiments of artillery, and seven regiments of infantry. The regular army numbers 12,539, officers and men. There are 58 military posts and arsenals in the United States, besides others in a state of forwardness. In times of foreign invasion, insurrection, or rebellion, the militia of the several states is under the command of the general government.

The Military Academy at West Point, in New York, was established in 1802. The number of cadets is limited to 250. From the establishment of this institution to September 2, 1828, there had been 1289 cadets admitted; 540 commissioned; 477 resigned; 162 discharged; 20 had died; and in 1830, 213 remained. The cost of this establishment to 1828, was 1,185,421 dollars.

From 1795 to 1817 inclusive, there were made at the Armory, at Harper's Ferry, Virginia, 82,720 muskets, 11,870 repaired, and 4,100 pistols; at Springfield, Mass., there were made 128,559 muskets, 1,202 carbines, and 45,800 repaired. The expenses at the latter place for purchases, buildings, repairs, &c., was 1,820,122 dollars. The number of muskets manufactured in the United States' armories in 1832, was 25,500; Hall's rifles, 4,360; screw drivers, 16,960; wipers, 26,560; arm chests, 716; and various other articles. Expenditures, 405,944 dollars.

MILITIA of the United States, 1,492,414.

NAVY.

Navy of the United States.—A Secretary of the Navy and Board of Commissioners. There are 55 Captains; 37 Masters Commandant; 290 Lieutenants; 64 Surgeons; 42 Purasers; 9 Chaplains; and 12 Navy Agents. A Chief Naval Constructor. There are 7 Navy Yards in the United States. One at Portsmouth, N. H.; one at Charlestown, Mass.; one at Brooklyn, N. Y.; one at Philadelphia, Penn.; one at Washington, D. C.; one at Gosport, Va.; one at Pensacola, Florida.

The number of vessels in our Navy is 56; viz: 11 ships of the line, 12 frigates of the first class, 2 frigates of the second class, 21 sloops of war, 4 brigs, and 8 schooners. In addition to the above, are the 2 steam vessels, Missouri and Mississippi. The expense of which, for the past 25 years, was 18,503,584 dollars.

The annual cost of a 74 gun ship on a cruise, is 180,360 dollars; in ordinary, 6,433 dollars. Of a 44 gun frigate on a cruise, 112,000 dollars; in ordinary, 5,000 dollars. Complement of a 74, 656 men; of a 44, 450; and of a sloop of war, first class, 184 men. The cost of a 36 to a 74 gun ship, is estimated at 4,500 dollars per gun; of a 32, 4,000 dollars; and of a 20 gun ship, 3,500 dollars per gun.

Two Dry Docks, one at Norfolk, the other at Charlestown; constructed of hewn granite of unrivalled masonry. The latter is 341 feet in length, 80 in width, and 30 in depth, and cost 652,482 dollars. The dock at Norfolk cost 872,220 dollars.

POST OFFICE.

General Post Office.—Rates of Postage:—For every letter of a single sheet, not over 30 miles, six cents; over 30 to 80 miles, ten cents; over 80 to 150 miles, twelve and a half cents; over 150 to 400 miles, eighteen and three-quarter cents; over 400 miles, twenty-five cents. Double, triple, and quadruple letters, in the same ratio. No letter can be charged with more than quadruple postage unless its weight exceeds one ounce, *avoirdupois*.

Newspapers, or one sheet of printed paper, not over 100 miles to any state, and to any distance in the state where printed, one cent; over 100 miles out of the state where printed, one and a half cents. Magazines and pamphlets, for every 100 miles, four cents per sheet; over 100 miles, six cents. If published *periodically*,

for 100 miles, one and a half cents; over 100 miles, two and a half cents.

EXPENSES, 1840, 4,705,396 dollars. Receipts, 4,539,009 dollars.

The privilege of franking, and receiving letters free of postage, is given to the following persons, viz:—

President and Vice President of the United States; Secretaries of State, Treasury, War, and Navy; Post Master General and Assistants Post Master General; Attorney General; Compt's. of the Treasury; Aud't's.; Reg. Treas.; Commissioner of the Gen. Land Office; Ex-Presidents of the United States; Members of Congress (during the Session, and 60 days before and after the same); Commissioners of the Navy Board; Adj't. Gen.; Comm'y. Gen.; Ins'p's. Gen.; Quart. Mas. Gen.; Pay Mast. Gen.; Sect'y. of the Senate; Clerk of the House of Representatives; Superintendent of the Patent Office; and Post Masters, not to exceed half an ounce in weight, and one daily newspaper.

MINT.

United States Mint.—Commenced in 1792 at Philadelphia. The coinage effected from the time of its establishment to 1838, including gold, silver, and copper, amounted to 77,346,448 dollars. In 1840, there were coined at Philadelphia, 2,260,667 dollars; at New Orleans, 915,600 dollars; at Charlotte, 127,055 dollars; at Dahlonega, 123,310 dollars,—total, 3,426,632 dollars. The number of pieces coined at Philadelphia was 7,053,074; at New Orleans, 3,446,900; at Charlotte, 31,828; at Dahlonega, 26,831,—total number of pieces, 10,558,626. The deposits in gold in Philadelphia during the year, were 1,201,998 dollars, of which 176,776 dollars were derived from mines in the United States.

An eagle of gold, valued at ten dollars, must weigh eleven penny-weights and six grains. A dollar must weigh seventeen penny-weights and seven grains of silver; and a cent must weigh eleven penny-weights of copper. All coins ceased to be a legal tender in the United States on the 15th October, 1797, except federal coins and Spanish milled dollars.

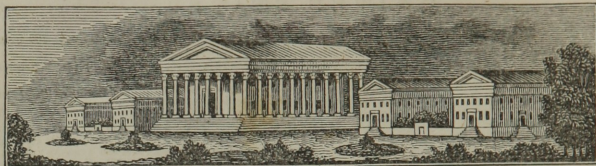
PUBLIC LANDS.

Public Lands of the United States.—The public lands within the states and territories of the United States, consist of those lands ceded by many of the states to the United States; the latter taking the responsibility of extinguishing the Indian titles, together with those lands obtained from France by the purchase of Louisiana, and those by the cession of the Floridas from Spain.

The minimum price of these lands is one dollar and twenty-five cents per acre; and, since 1820, no credit is given to purchasers. These lands are surveyed before they are offered for sale. They are divided into townships of six miles square, which are divided into thirty-six sections, one mile square, containing each 640 acres; and sold in sections and parts of sections. One mile square in each township is reserved for a school fund. They hold out a most inviting prospect to the enterprising emigrant.

The quantity of unceded lands belonging to the Indians, and lying north and west of the states and territories of the United States, but within the limits of the United States, has been estimated at about 750,000,000 acres.

Allowing that the public domain was sold at the low price of *seventy five cents* an acre, it would supply ample means for constructing a double track *Rail-road* of Quincy granite and wrought iron, from *Eastport* to *New Orleans*, and furnish a fund to procure locomotive engines, cars, &c., and keep the whole in repair forever. It might also give to each state and territory a *school fund* of *three million dollars*, and leave a balance in the treasury of many millions for *miscellaneous* expenditures. These lands are becoming more valuable every day, and are not only worth looking at, but after.



The Girard College for Orphans.

Stephen Girard was born in Bordeaux, France, in 1746, arrived at New York as cabin-boy in 1775, settled in Philadelphia in 1779, "a poor man, dealing in old iron, old rigging," &c. He became a banker in 1812, and after, as shipper, merchant, builder, farmer and banker, amassing a fortune estimated at more than seven million dollars, he died in 1831. After bequeathing to his brother, sister and nieces various sums, amounting to one hundred and fifty thousand dollars, and other legacies to public and private purposes, the Will proceeds:—

"XXI. And so far as regards the residue of my personal estate, in trust, as to *two millions of dollars*, part thereof to apply and expend so much of that sum as may be necessary—in erecting, as soon as practicably may be, a permanent College, with suitable out-buildings, sufficiently spacious for the residence and accommodation of at least three hundred scholars, and the requisite teachers and other persons necessary in such an institution as I direct to be established: and in supplying the said College and out-buildings with decent and suitable furniture, as well as books and all things needful to carry into effect my general design.

"The said College shall be constructed with the most durable materials, and in the most permanent manner, avoiding needless ornament, and attending chiefly to the strength, convenience, and neatness of the whole: It shall be at least one hundred and ten feet east and west, and one hundred and sixty feet north and south: It shall be three stories in height, each story at least fifteen feet high in the clear from the floor to the cornice: It shall be fire-proof inside and outside. The floors and the roof to be formed of solid materials, on arches turned on proper centres, so that no wood may be used, except for doors, windows, and shutters: There shall be in each story four rooms, each room not less than fifty feet square in the clear; the four rooms on each floor to occupy the whole space east and west on such floor or story, and the middle of the building north and south; so that in the north of the building, and in the south thereof, there may remain a space of equal dimensions, for an entry or hall in each, for stairs and landings: In the north-east and in the north-west corners of the northern entry or hall on the first floor, stairs shall be made so as to form a double staircase, which shall be carried up through the several stories; and, in like manner, in the south-east and south-west-corners of the southern entry or hall, stairs shall be made, on the first floor, so as to form a double staircase, to be carried up through the several stories; the steps of the stairs to be made of smooth white marble: The outside walls shall be faced with slabs or blocks of marble or granite, not less than two feet thick, and fastened together with clamps securely sunk therein,—they shall be carried up flush from the recess of one foot formed at the first floor where the foundation outside wall is reduced to two feet: The floors and landings as well as the roof shall be covered with marble slabs, securely laid in mortar; the slabs on the roof to be twice as thick as those on the floors. In minute particulars, not here noticed, utility and good taste should determine. There should be at least

four out-buildings, detached from the main edifice and from each other, and in such positions as shall at once answer the purposes of the institution, and be consistent with the symmetry of the whole establishment: each building should be, as far as practicable, devoted to a distinct purpose; in that one or more of those buildings, in which they may be most useful, I direct my executors to place my plate and furniture of every sort.

"When the College and appurtenances shall have been constructed, and supplied with plain and suitable furniture and books, philosophical and experimental instruments and apparatus, and all other matters needful to carry my general design into execution; the income, issues and profits of so much of the said sum of two millions of dollars as shall remain unexpended, shall be applied to maintain the said College according to my directions.

"If the income, arising from that part of the said sum of two millions of dollars, remaining after the construction and furnishing of the College and out-buildings, shall, owing to the increase of the number of orphans applying for admission, or other cause, be inadequate to the construction of new buildings, or the maintenance and education of as many orphans as may apply for admission, then such *further sum as may be necessary* for the construction of new buildings and the maintenance and education of such further number of orphans, as can be maintained and instructed within such buildings as the *said square of ground* shall be adequate to, shall be taken from the final residuary fund hereinafter expressly referred to for the purpose, comprehending the income of my real estate in the City and County of Philadelphia, and the dividends of my stock in the Schuylkill Navigation Company—my design and desire being, that the benefits of said institution shall be extended to as great a number of orphans as the limits of the said square and buildings therein can accommodate."

At a subsequent period having purchased 45 acres of land, in the suburbs of the city, he says, I "direct that the Orphan establishment, provided for in my said Will, instead of being built as therein directed upon my square of ground between High and Chestnut and Eleventh and Twelfth Streets, in the City of Philadelphia, shall be built upon the estate so purchased from Mr. W. Parker; and I hereby devote the said estate to that purpose, exclusively, in the same manner as I had devoted the said square, hereby directing that *all the improvements and arrangements* for the said Orphan establishment, prescribed by my said Will as to *said square, shall be made and executed upon the said estate*, just as if I had in my Will devoted the said estate to said purpose."

OTHER LEGACIES.—To Philada. and N. Orleans his Louisiana estates; for improving Philada. 500,000 dollars, and Penna. 300,000: to his brother Etienne and niece in France a house in Bordeaux and 5,000, and his brother's six children 5,000 each; to his nieces in Philada. Mrs. Hemphill 60,000, Mrs. Haslam 10,000, and Mrs. Clark 10,000, and her daughter 20,000. To his Captains 1,500 each; his apprentices 500 each—to widow of Jared Ingersoll an annuity of 1000, and in annuities to Mrs. C. Girard 400, his two housekeepers 500 each, and their sisters 300 each, to different charitable institutions of Philadelphia 116,000 dollars.

EDUCATION.

Promote as objects of primary importance institutions for the general diffusion of knowledge. — *Washington's Farewell Address.*

A sheriff of London, after adequate experience, declares that the most prominent causes of crime are to be traced to the want of education—the want of parental care, correction, and control, &c.

HABIT! HABIT!

I trust every thing to habit; habit, upon which, in all ages, the law-giver, as well as the school-master, has mainly placed his reliance; habit which makes every thing easy, and casts all difficulties upon the deviation from the wonted course. Make sobriety a habit, and intemperance will be hateful and hard; make prudence a habit, and reckless profligacy will be contrary to the nature of the child grown an adult. Give a child the habit of sacredly regarding the truth—of carefully respecting the property of others—of scrupulously abstaining from all acts of improvidence which can involve him in distress, and he will just as likely think of rushing into the element in which he cannot breathe, as lying, or cheating, or stealing. — *Lord Brougham.*

FAMILY GOVERNMENT.

We can, therefore, hardly overrate the importance of sound and wholesome family discipline and instruction. Important as are laws and civil government, family influence is paramount. It is not for legislation to affect materially the family, the most ancient and venerable and permanent of all the forms of society, commencing with man's history and ending only when man shall cease to be a dweller upon earth. The moral influence of families depends upon themselves. Each family to answer the ends of its existence, and contribute to the common weal and glory, must care for itself, and attend to its own government, purity and happiness. Each must firmly inculcate within its own sacred enclosure the virtuous and conservative principles of truth, reverence, submission, peace, goodness, and love of order, which alone can give stability to the time, and safety and grandeur to the state.

PHYSICAL EDUCATION.

To physical education belong the proper training and strengthening of all the powers of the body, and the avoidance of every thing calculated to injure its structure.

The first and most striking error in physical education, is the unnecessary confinement to which the child is subjected. No one that has observed a child, be-

tween the ages of three and six, can doubt that nature requires that he should be almost constantly in motion during his waking hours. How painful then, how unnatural, must be his situation in school! Pent up, for six hours a day confined to one seat, and that a very uneasy one, where he is forced to sit perfectly still and silent, how irksome must be his condition, how prejudicial to his health! And what aggravates the evil is, that it is wholly unnecessary. For the extended confinement defeats the very purpose for which it is imposed. "The body and mind," says Sterne, "are like a jerkin and its lining. If you rumple the one, you rumple the other." Besides the injury to his health, his mind becomes heavy and dull, and his progress, consequently, is not half what it would be under a more rational course.

The school-room is too small either for convenience, comfort, or health. Most children go first to school while many of their bones are still in a forming state. They go almost as early as when the Chinese turn their children's feet into the shape of horses' hoofs. And, at this period of life, the question is, whether the seats shall be conformed to the children, or the children deformed to the seats. Let any man try the experiment, and see how long he can sit in an upright posture, on a narrow bench or seat, without being able to reach the floor with his feet. Yet, to this position, hundreds of children are regularly confined, month after month; Nature inflicts uneasiness and distress if they do sit still, and the teacher inflicts his punishments, if they do not. The closet for hats and coats is small, or altogether wanting, so that the children acquire disorderly and wasteful habits with their clothes. The room is badly ventilated, so that in cool weather when the doors and windows are kept shut, the children are forced to breathe the same air over and over, until it has become unfit for respiration, thus laying a foundation for debility and disease. — *Palmer's Prize Essay.*

Extracts from the Preface to Taylor's
DISTRICT SCHOOL OR NATIONAL
EDUCATION.

All who are competent to judge, and will give their due attention to the facts which this book discloses, must unite in the conclusion, that our present system of popular education is radically defective.

It is on this point chiefly that the public mind requires to be disabused; it is in relation to this that there exists—I speak especially of this State*—a very general delusion. We are told that under the fostering patronage of the government, more than half a million of children are taught in our common schools,—our pride, as citizens of the Empire State, is gratified, and we content ourselves with the general statement, omitting to inquire into the character and value of the instruction which is thus imparted.

We know not, for we care not to know, that it is in truth so imperfect and scanty as hardly to deserve the name even of elementary,—that it is unconnected with any thing

* New York.

resembling moral discipline or the formation of character,—that the teachers, inexperienced, transitory, snatched up for the occasion, are paid by salaries which hardly exceed the wages of the menial servant or the common labourer,—and that, as a necessary consequence, ignorant and disqualified, they are perhaps even overpaid by the pittance which they receive.

Yet it is in such schools and by such instructors that thirty-eight out of forty of the children of the nation are, as we phrase it, educated. We have lived in a pleasing delusion; but it is time we should awake.

I do not hesitate to avow the belief, that without regulations far more extensive than have yet been introduced,—a control far more enlightened and constant than has yet been exercised,—and fiscal aid far more ample than has yet been afforded, it is vain to expect that the character of our common schools can be truly and permanently improved. It is conceded by all that nothing can be done without competent teachers, and such teachers, in the number and of the qualifications required, we can never have, unless they are properly *trained*, and properly *examined*, and *watched*, and *controlled*, and, above all, properly *rewarded*.

The dissemination of this book, and of the truths which it contains, will tend thus to prepare the public mind, to produce the right state of feeling and of thought; for assuredly it will not be read in vain by parents who are such in heart and in conscience, not in name merely.

There are some truths which it may be painful to confess, yet are most necessary to be known. To the reflecting and the candid it will not seem extravagant to say that the chief source of the evils, the disorders, the crimes which afflict society, is to be found in the heartless indifference of the higher classes, the rich, the educated, the refined, towards the comfort and well-being of those they term or deem their inferiors, and their consequent neglect of the intellectual and moral improvement of those who always have been, and would seem by the order of Providence, always must be, the most numerous class—those who depend on their daily labour for their daily support.

It is this neglect, the alienation it produces, the ignorance it perpetuates, the vices it fosters, which leave marked the broad line of separation, on the one side of which are the few, indolent, disdainful, proud, on the other the many, restless, envious, discontented. It is this which keeps the minds of a multitude in a constant state of irritation,

and which, when the base demagogue seeks to array the poor against the rich, collects the crowd of his willing auditors, and arms him with his dreaded power.

It is this which caused the atrocities of the French Revolution, and which deepens and darkens the cloud that now hangs over England.* It is this neglect—the grand crime of civilized and Christian society, which, in every country, sooner or later, and in none more certainly than in our own, if continued, is destined to meet a fearful retribution. Here most emphatically it is true, that the people must be raised to the level of their rights and duties, must be made the safe depositaries of the power which they possess, or in the history of other republics we may read our own fate;—first, lawless anarchy—next, the calm which fear and the bayonet produce—the calm of military despotism.

How then are these evils to be prevented?—this fate to be averted? I answer, all that is odious, all that is dangerous in the distinctions which the free acquisition and the lawful enjoyment of property must always create, will soon vanish, and all classes be united in the enduring bonds of sympathy and gratitude, when the rich (I include all who have the leisure or means to bestow) shall understand and feel that it is their paramount duty to improve the physical and elevate the moral condition of their fellow-beings, or, to express nearly the whole in one word—to educate the poor.

Let those on whom the burden ought to fall willingly assume—cheerfully sustain it, and there will be no further obstacle to the action of the legislature, no further difficulty in organizing a system effectual, permanent, universal.

* *The Working Classes of England.*—Mr. C. Butler, in a speech in Parliament on a late occasion, said:—"Whenever I contemplate the condition of the working classes—the deep and dark gulf that separates them from the knowledge and sympathies of their superiors in fortune, the utter ignorance in which we are of their feelings and wants, the little influence which we have over their conduct, and the little hold which we appear to have on their affections—I shrink with terror from the wild passions and dense ignorance that appear to be fermenting in that mass of physical force.

THE BIBLE.

A nation must be truly blessed, if it were governed by no other laws, than those of this blessed book; it is so complete a system, that nothing can be added to or taken from it; it contains every thing needful to be known or done; it affords a copy for a king, and a rule for a subject; it gives instruction and counsel to a senate, authority and direc-

tion to a magistrate; it cautions a witness, requires an impartial verdict of a jury, and furnishes a judge with his sentence; it sets the husband as lord of the household, and the wife as mistress of the table; tells him how to rule and her how to manage. It entails honour to parents, and enjoins obedience upon children; it points out a faithful and eternal guardian, to the departing husband and father, tells him with whom to leave his fatherless children, and in whom his widow is to trust, and promises a father to the former, and husband to the latter. It

defends the right of all, and reveals vengeance to the defrauder, over-reacher, and oppressor. It is the first book and the oldest book in the world. It contains the choicest matter, gives the best instruction, and affords the greatest pleasure and satisfaction that ever were revealed. It contains the best laws and profoundest mysteries that ever were penned. It brings the best tidings, and affords the best of comforts to the inquiring and disconsolate. It exhibits life and immortality, and shows the way to everlasting glory.

THE PAST TO THE FUTURE.

The following sentiment from an address delivered at the second centennial celebration of the settlement of Boston, is significant and impressive:—"The great comprehensive truths, written in letters of living light on every page of our history,—the language addressed by every past age of New England to all future ages, is this—Human happiness has no perfect security but freedom; freedom none but virtue; virtue none but knowledge; and neither freedom, virtue, nor knowledge, has any vigour, or immortal hope, except in the principles of the Christian faith, and in the sanctions of the Christian religion."

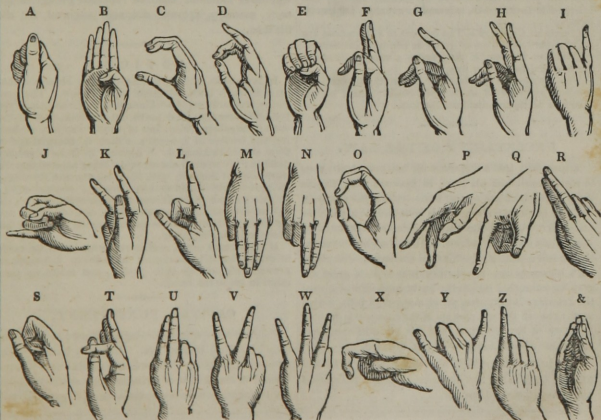
DACTYLOLOGY, (*Finger Talking*),

OR

ALPHABET FOR THE DEAF AND DUMB.

This Alphabet explains itself. Half an hour is sufficient to acquire a knowledge of it, and short practice will give ease and rapidity. It may be made a means of amusement, and occasionally of real service; while to none can it be without interest. The first attempt at instructing the Deaf and Dumb was made by a Spanish monk, who died in 1584. More has been done for them in the United States than in any other country.

Note.—J and Z are figured in the air: J with the little finger, and Z with the fore finger. Significant gestures often express whole sentences, and by means of the Manual Alphabet all the words and phrases of conversation can be expressed. The words should be separated, either by a slight pause, or a horizontal motion of the hand from right to left, or a snap of the fingers.



THE LAW.

Every citizen should earnestly and constantly bear in mind the important fact, that his only safety, for person, property, liberty and life, is in the absolute supremacy of the constitution and the laws.

Betting on elections.—This is an extensive and pernicious evil, alike injurious to the citizen and to the purity of elections. All are interested in its suppression; let all then unite in getting up and presenting petitions to the several state legislatures for the passage of a law similar to that introduced into the Legislature of Missouri against betters and the stakeholders, and fining both to the amount of the money or property bet. Also punishing by fine, any person who may publish a bet, or assist in any way in making it.

A decision in Ohio makes proprietors of stages responsible for passengers' baggage, notwithstanding their caution of "All baggage at the risk of the owners."

A Non-resident.—A person having a place of business in a city or town, and boarding and lodging in another, is a non-resident in his place of business.

Titles of land derived under sales for taxes are declared good by Supreme Court of Illinois.

A Salesman receiving a per centage is not thereby constituted a partner.

Breach of trust is where valuables are received in the course of employment, for or in the name of the employer, and embezzled; but if the valuables have come to the possession of the employer, the offence is larceny.

A Husband: he is liable for goods furnished his wife, if, from ill treatment or other sufficient cause, she does not live with him; but if she leave him from unjustifiable cause, he is not liable even for necessities, whether the tradesman knows of such separation or not.

Erasing or altering an endorsement of a payment on a note is forgery.

A town is liable for damages occasioned by any obstruction placed on the road by human agency, and is bound to make roads safe and convenient for travellers.

Common Carriers.—The owners of a steamboat are responsible to shippers of goods as common carriers.

Common carriers, if they make a wrong delivery, are responsible for any loss.

The owners of goods must have them properly marked, and entered in carriers' books; and if he neglects to do it, he must bear the loss.

UNCERTAINTY OF THE LAW.

A man falls into a dispute with his neighbour, runs to his counsel, tells his story in his own way, forgets those facts which are against him,—relates the rest with that sort of exaggeration which is natural to a party,—undertakes to prove the whole case as he has stated it,—and asks for legal redress. After such an examination, a suit is instituted,—the trial comes on,—the plaintiff's witnesses are heard, they reduce in a great degree the colouring which the party himself had given; the defendant's witnesses prove many new facts, which totally change the complexion of the case,—it is decided in favour of the defendant, and the plaintiff ever after complains of—the uncertainty of the law.

The fault, it is evident, was in himself. If he had told the truth in the first instance, he might have saved his money, time and temper.

At the present day every man has a fling at the uncertainty of the law. Yet upon investigation, it would appear that in at least nine cases out of ten, the uncertainty complained of, is not in the law, but in the facts to which it is to be applied. The law has sins enough of its own to answer for;—defects sufficiently abundant—contradictions—doubts—even absurdities, which ought to be removed or amended,—but, with all these, we repeat that, in proportion to the number of disputes which arise between man and man, there are very few cases, in which, if the facts were clearly ascertained, any respectable member of the profession could not, without hesitation, say what would be the law.

The event of litigation is indeed almost always uncertain: the law rarely so. Nor could any plan be devised for destroying this quality of litigation. If the most minute, distinct and intelligible rule were laid down for every variety of possible circumstances, (which, by the by, never has been or can be done,) there would remain sources of uncertainty almost as fruitful as those which now exist. For after all, what would be the rule of law proper to be applied in any case, would depend entirely upon the facts, and those facts must be proved by human testimony, and to the satisfaction of a human tribunal; the testimony and the tribunal being both human, therefore both fallible;—the former liable to incorrectness or incompleteness occasioned by intentional falsehood, imperceptible bias, or defect of memory—the latter (throwing out of view wilful error as of rare occurrence,) equally liable to misdecision from prejudice, misapprehension or defect of judgment.

These are faults not of this or that particular system, but of human nature. They will be entirely cured, whenever mankind shall be rendered perfect in honesty, memory, apprehension and judgment, but not till then.

ADVICE.

In law, as in physic, it may truly be observed, that prevention is better than the risk of cure. The preceding remarks on the "Uncertainty of the law," are full of instruction, and point out the risk, besides the certain expense, delay, loss of time, vexation, ill-feeling and trouble of law-suits, which in every shape or form should be avoided. "Agree with thine adversary quickly;" do so even at a sacrifice, being assured that the intricacies of the law, with its twistings, and turnings; its precedents innumerable, decisions contradictory; its nice technicalities, forms, and mysteries, are all inexhaustible and incomprehensible, and combine, too frequently, to render law an overmatch for plain honesty and simple justice.

If differences arise, and a reference must be made to others, let it be to mutual friends—to disinterested persons selected by both parties, and make up your mind to abide the result.

CAPITAL PUNISHMENT.

Public attention is becoming awakened to the enormity of taking human life. Not only humanity but policy is against it. There is not a point so well-established in the science of Criminal Law as that of severe punishments increasing crimes, except, perhaps, that

of mild punishments diminishing them. The statistics on this subject are perfectly conclusive. In England, in 1821, there were 114 executions, and in 1838 only 6, while crime within that period has diminished in a rapid and remarkable degree. Similar results have followed the partial disuse of the punishment of death in France, Prussia, and Belgium. Whatever experience has been acquired by this unexampled reform, has, at least, been safely and innocently gained. Some hundreds of offenders, had they committed their crimes a few years before, would have died by the hand of the executioner. They have been allowed to live. Life, the only season of repentance, with all its opportunities of regaining the favour of an offended Deity, has been continued to them; and from this lenity, society has derived no injury, no loss.

For murder, the penalty of death, as an example, is momentary, and of no beneficial effect. It disgusts the good, and brutalizes the bad, who witness the spectacle. As an act of extreme violence, it teaches violence to the people; as an act of deliberate homicide, it diminishes the regard due to the sanctity of life, and renders murder less revolting to the un-instructed mind.

When will those who are chosen to make laws for us, when will men who profess Christianity, learn and practise something of the Christian spirit, against which every feature of this law is at open war? Capital punishment is a blot upon our institutions, and a disgrace to any civilized community.

An account current rendered and accepted without objection being made in a reasonable time, precludes objection afterwards, and makes it a stated account.

A Will dictated and taken down in pencil only, and signed by two witnesses, is valid, if deceased was in sound mind when he gave the instructions.

Murder.—The punishment of death is revolting, but, nevertheless, while it continues to be the law, the juror who racks his mind for an excuse to avoid the performance of a painful duty, forgets that in saving a forfeited life, his verdict becomes a recorded license for future assassinations.

NATURALIZATION LAWS.

Congress alone has power to make or regulate the laws of Naturalization.

An alien must renounce in court, allegiance, &c. to any foreign power, and declare intention of becoming a citizen at least two years before admission. Must swear to support the constitution, renounce any hereditary title or order of nobility, and must have resided five years in the country, and satisfy the court that he has behaved as a man of good moral character, attached to the principles of the Constitution of the United States, and well disposed to the good order and happiness of the same.

Excellent laws, if well administered; but how shamefully disregarded! The mockery too frequently enacted in their administration, in at least some of our courts, is matter of pain and humiliation, and to none more so than the intelligent naturalized citizen himself.

Children of naturalized citizens, if under twenty-one years of age at the time of their parents' naturalization, shall, if dwelling in the United States, be considered as citizens. An alien having declared his intention, and dying before he was naturalized, his widow and children, on taking the oaths prescribed, shall be entitled to all the rights of citizenship.

PRESIDENTIAL ELECTION—1840.

FOR PRESIDENT.

Votes in the Electoral College.

William Henry Harrison	234
Martin Van Buren	60

FOR VICE PRESIDENT.

John Tyler	234
Richard M. Johnson	48
Lyttleton T. Sewell	11
James Polk	1

	<i>Popular Vote.</i>	<i>Har.</i>	<i>V. B.</i>
Maine	46,612	46,201	
New Hampshire	26,434	32,570	
Vermont	32,445	18,029	
Massachusetts	72,874	51,944	
Rhode Island	5,213	3,263	
Connecticut	31,601	25,296	
New York	225,813	212,519	
New Jersey	33,350	31,034	
Pennsylvania	144,019	143,676	
Delaware	5,967	4,884	
Maryland	39,028	28,752	
Virginia	42,501	43,893	
North Carolina	46,376	39,782	
Georgia	40,275	31,933	
Alabama	28,471	33,992	
Mississippi	19,518	16,995	
Louisiana	11,295	7,616	
Tennessee	60,391	48,289	
Kentucky	58,489	32,616	
Missouri	22,972	29,760	
Ohio	148,157	124,782	
Indiana	65,308	51,685	
Illinois	45,537	47,476	
Michigan	22,907	21,008	
Arkansas	4,462	6,048	
South Carolina	chosen by the Legislature.		

THE MORAL OF THE ELECTION.

The spectacle of a free people submitting every thing to the ballot boxes, and abiding the result in the decision of the majority, is indeed delightful. In the preliminaries there is less to rejoice at; but in the quiet subordination to the great principles of our social system, which has just been exhibited, we feel the highest joy. We have in it the assurance that the people understand their high responsibility, as freemen: that while each citizen claims his own rights, he is willing to accord as much to his fellows.

One reason for the superior quiet of the late election is, that people no longer imagine the existence of freedom and the permanency of its institutions to depend on the result of an election. Americans have grown confident in the stability of their system, and if the right men and right principles cannot be made to succeed this time, they expect the steady workings of a sound system to bring all right at last. In the earlier days of our nation, republicanism was an experiment, which had before been often tried, and had as often failed; and it was thought it might very possibly fail again in this its last and best effort. But it is not so now. Few men now feel doubtful as to the full success and perpetuity of liberty in these United States.

APPROPRIATE.

PASSAGES FROM THE FAREWELL ADDRESS OF WASHINGTON.

"The unity of government which constitutes you one people, is now dear to you. It is justly so; for it is a main pillar in the edifice of your real independence; the support of your tranquillity at home; your peace abroad; of your safety; of your prosperity; of that very liberty which you so highly prize.

* * * * *

"It is of infinite moment, that you should properly estimate the immense value of your national union to your collective and individual happiness; that you should cherish a cordial, habitual, and immovable attachment to it; accustoming yourselves to think and speak of it as of the palladium of your political safety and prosperity; watching for its preservation with jealous anxiety; discountenancing whatever may suggest even a suspicion that it can, in any event, be abandoned; and indignantly frowning upon the first dawning of every attempt to alienate any portion of our country from the rest, or to enfeeble the sacred ties which now link together the various parts.

"For this you have every inducement of sympathy and interest. Citizens by birth, or choice, of a common country, that country has a right to concentrate your affections. The name of American, which belongs to you in your national capacity, must always exalt the just pride of patriotism, more than any appellation derived from local discriminations. With slight shades of difference, you have the same religion, manners, habits, and political principles. You have, in a common cause, fought and triumphed together; the independence and liberty you possess, are the work of joint efforts, of common dangers, sufferings and success."

When tempted to the violence of heated partizanship, we have reverently remembered the farewell counsels of that same pure and exalted patriot:

"The spirit of party is, unfortunately, inseparable from our nature, having its root in the strongest passions of the human mind. * * * *

"The alternate dominion of one faction over another, sharpened by the spirit of revenge natural to party dissensions, which, in different ages and countries, has perpetrated the most horrid enormities, is itself a frightful despotism. But this leads at length to a more formal and permanent despotism. The disorders and miseries which result, gradually incline the minds of men to seek security and repose in the absolute power of an individual; and, sooner or later, the chief of some prevailing faction, more able or more for unate than his competitors, turns this disposition to the purposes of his own elevation on the ruins of public liberty. * * * *

"It serves always to distract the public councils and enfeeble the public administration. It agitates the community with ill-founded jealousies and false alarms; kindles the animosities of one part against another; foment occasional riot and insurrection.

* * * * *

"In those of the popular character, in governments

purely elective, it is a spirit not to be encouraged. From their natural tendency, it is certain, there will always be enough of party spirit for every salutary purpose. And there being constant danger of excess, the effort ought to be, by force of public opinion, to mitigate and assuage it. A fire not to be quenched, it demands a uniform vigilance to prevent it bursting into a flame, lest, instead of warming, it should consume."

POLITICIANS—OFFICE HUNTERS.

By Judge Hopkinson.

In the conclusion of the address,* the Lecturer exhorted the members to be constant and diligent in their attention to the duties and exercises of their association; to improve themselves by the exercise of their faculties or the power of examining and discussing subjects of science and literature; in the art of composition and the habit of delivering their opinions and arguments in public, with facility and propriety. He proceeded—In this country, where every place of public employment waits alike upon every citizen, where the worth of the man is his recommendation, and we know nothing of the distinctions of birth and blood, who can say that he may not be called to the performance of duties which will require a facility of speech and pen. The halls of legislation are open to all. You may find yourselves there, or in other situations of public trust, for which the exercises of your association may be a necessary preparation to enable you to acquit yourselves with honour and usefulness.

Do not, however, believe that I can be so treacherous a counsellor as to mean to hold out to you inducements to seek political preferment. But it may seek you; it may be put upon you at times and under circumstances when, as good citizens, you cannot decline it. I would rather say to you, avoid it, as a path beset with difficulties and danger; mortifications and disappointments. The man who sets out in life to live by public office will surely die in poverty and neglect. I would not direct your aspirations to such objects. I would not light up in your hearts the low and disgraceful ambition of an office-hunter. The only independent man is he who depends upon himself. Rely upon the power and skill of your own hands; upon the ingenuity and intelligence of your own heads; upon your industry, prudence and integrity. They will never deceive or desert you; you will never lose your popularity with them. Make them the foundation of your fortune and respectability, and they will not sink under you. Serve your country, when your country wants you, but seek not popular favour at the expense of your honour, independence and self-respect. Of all the occupations to which pride or idleness can drive a man, the most degrading is that of a begging politician, a regular public-hunter. He is a compound of meanness, hypocrisy and falsehood. He is ready to serve all, and to betray all. He is true to nothing but his own selfishness.

The age of the venerable lecturer and his station, removed from the prejudices and conflicts of party, give weight to his admonitions, which should be re-

* A popular lecture before the Athenian Institute, Philadelphia.

ceived as those of an impartial judge. We are firm in the conviction that among the greatest evils with which our beloved country is or can be afflicted is the hankering after office. It is a curse alike pernicious to the general and to individual welfare. Instances everywhere abound of men with good trades or with talent and abilities to insure success in any honest and independent calling, who have neglected their business in hopes of securing an office. They forsake the certain means of subsistence, if not independence, which their business offers for the uncertainty of office. A regular business is neglected or given up for two or three years' enjoyment of office; the emolument of which is barely sufficient to afford a living. Suffering a constant tax on his time and purse, and the formation of idle, dissolute or unsettled habits, he soon finds himself turned out to make room for some new favourite. It has been truly asserted that "nothing so much unfits a man for the usual occupations of life as office. The habit of having a salary to depend upon, takes away the common stimulus to exertion, and the idleness often attendant upon office, leads to a great many bad habits difficult to correct. Salary men generally spend all their salaries, and have but little to lay up for sickness or old age. A rich office-holder is

generally a novelty, and a contented office-holder is a greater novelty still."

The Public welfare is no less endangered by this inordinate thirst for office, since experience has so frequently demonstrated the fact that measures of great national importance have been adopted or neglected solely with reference to their effects upon party. The paramount interests of the state or the country have been too often sacrificed in the unworthy scramble for office. In the declaration that "to the victors belong the spoils," the monstrous principle has been avowed of "spoils and plunder;" as though the enlightened freemen of the country of WASHINGTON were called on to exercise the glorious right of suffrage not to preserve our free institutions, not to promote the general welfare, not to maintain the prosperity which the country has so largely participated in, or to perpetuate the liberties with which we are blessed, not for objects so sacred as these, but for the unworthy and unhallowed purpose of plunder!! Though judicious changes in office may at times be proper and necessary, yet the idea of holding up the offices of the country as "rewards and spoils" for reckless partizans is a sentiment that should be reprobated by every true American.

SYNOPSIS,

Showing the year in which each State of the Union was settled, and by what people—the number of square miles—time of holding elections—qualification of voters, and number of Representatives and Electors from each State.

MAINE. Settled 1630, by English; 32,000 square miles; capital Augusta; General Election second Monday in September; Legislature meet first Wednesday in January; Voters must reside in the state three months before any election; sends Members of Congress, 8; Electors, 10.

NEW HAMPSHIRE. Settled 1623, by English; 9,500 square miles; capital Concord; General Election second Tuesday in March; Legislature meets on the first Wednesday in June; Voters require no other qualification than to be twenty-one years of age; sends Members of Congress, 6; Electors, 7.

MASSACHUSETTS. Settled 1620, by English; 7,500 square miles; capital Boston; General Election second Monday in November; Legislature meet first Wednesday in January; Voters, one year's residence in the state, and have paid a state or county tax; sends Members of Congress, 12; Electors, 14.

VERMONT. Settled 1749, by English; 10,200 square miles; capital Montpelier; General Election first Tuesday in September; Legislature meet second Thursday in October; Voters, to reside in the state one year; sends Members of Congress, 5; Electors, 7.

RHODE ISLAND. Settled 1636, by English; 1,360 square miles; capital Providence; General Election for governor and senators in April; for representatives in April and August; Legislature meet first Wednesday in June and last Wednesday in October; Voters must be resident in the state three months, and have a freehold of 134 dollars; sends Members of Congress, 2; Electors, 4.

CONNECTICUT. Settled 1633, by English; 4,760 square miles; capital New Haven; General Election first Monday in April; Legislature meet first Wednesday in May; Voters to hold a freehold of 7 dollars per annum, or have done Military duty, paid a state tax, and taken the prescribed oath; sends Members of Congress, 6; Electors, 8.

NEW YORK. Settled 1614, by Dutch; 46,000 square miles; capital Albany; General Election first

Monday in Nov. 3 days; Legislature meet first Tuesday in January; Voters, citizens 21 years of age, inhabitants of state for last year, and resident of county for last six months; coloured men, a freehold of 250 dollars, paid taxes, and been a citizen three years; sends Members of Congress, 40; Electors, 42.

NEW JERSEY. Settled 1624, by Danes; 8,300 square miles; capital Trenton; General Election, second Tuesday in October; Voters, to be citizens of the state one year, and worth fifty pounds proclamation money; sends Members of Congress, 6; Electors, 8.

PENNSYLVANIA. Settled 1682, by English; 44,000 sq. miles; capital, Harrisburg; Gen. Elec. 2d Tuesday in Oct.; Legislature meet 1st Tues. in Jan.; Voters, white, one year in state, 10 days where voting, and pay tax assessed 10 days before election, between 21 and 22 vote without tax; sends Mem. of Cong., 28; Electors, 30.

DELAWARE. Settled 1627, by Swedes and Fins; 2,100 square miles; capital Dover; General Election 2d Tuesday in October, or November; Legislature meet first Tuesday in January; Voters, the same qualifications required as in Pennsylvania; sends members of Congress, 1; Electors, 3.

MARYLAND. Settled 1634, by English; 14,000 square miles; capital, Annapolis; General Election first Monday in October; Legislature meet first Monday in December; Voters, one year's residence in the county where he shall offer to vote; sends Members of Congress, 8; Electors, 10.

VIRGINIA. Settled 1607, by English; 64,000 square miles; capital Richmond; General Election in April; Legislature meet first Monday in December; Voters, freehold of value of 25 dollars, or been a housekeeper one year, or been assessed, amounts to almost universal suffrage; sends Members of Congress, 21; Electors, 23.

NORTH CAROLINA. Settled 1650, by English; 48,000 square miles; capital Raleigh; General Election in August; Legislature meet second Monday in

November; Voter, citizen of the state one year, may vote for a member of the House of Commons, but must own fifty acres of land to vote for a senator; sends Members of Congress, 13; Electors, 15.

SOUTH CAROLINA. Settled 1689, by English; 24,000 square miles; capital Columbia; General Election second Monday in October; Legislature meet 4 h Monday in November; Voter, resident of the state two years, and six months of the district where voting; sends Members of Congress, 9; Electors, 11.

GEORGIA. Settled 1733, by English; 60,000 square miles; capital Milledgeville; General Election first Monday in October; Legislature meet first Monday in November; Voter, citizen of the state, and six months' residence of county where voting, and have paid all taxes imposed upon him; sends Members of Congress, 9; Electors, 11.

LOUISIANA. Settled 1699, by French; 48,000 square miles; capital New Orleans; General Election first Monday in July; Legislature meet first Monday in January; Voter, to reside one year in the county, and paid taxes within the last six months; sends Members of Congress, 3; Electors, 5.

OHIO. Settled 1788, by English; 39,000 sq. miles; capital, Columbus; General Election 2d Tuesday in Oct.; Legislature meet 1st Monday in Dec.; Voter, one year's residence in the state preceding the election, having paid, or been charged with, state or county tax; sends Mem. of Con. 19; Electors, 21.

KENTUCKY. Settled 1775, by Virginians; 42,000 sq. miles; cap. Frankfort; General Election first Monday in August; Legislature meet first Monday in November; Voters, two years' residence in the state, and in the county where offering to vote, one year preceding the election; sends members of Congress, 13; Electors, 15.

ILLINOIS. Settled 1749, by French; 52,000 square miles, capital, Vandalia; General Election first Monday in August; Legislature meet first Monday in December; Voter, residence in the state six months, but can only vote in the county where he actually resides; sends Members of Congress, 3; Electors 5.

INDIANA. Settled 1730, by French; 36,000 sq. miles; capital, Indianapolis; General Election first Monday in August; Legislature meet first Monday in December; Voter, one year's residence in the state preceding the election, entitles to vote in county of residence; sends Members of Congress, 7; Electors, 9.

ALABAMA. Settled 1713, by French; cap. Tuscaloosa; General Election first Monday in August; Legislature meet fourth Monday in October; Voter, citizen of the United States, one year of this, and three months' residence in the county where he shall offer to vote; sends Members of Congress, 5; Electors, 7.

MISSISSIPPI. Settled 1716, by French; capital,

Jackson; General Election first Monday in August; Legislature meet first Monday in November; Voter, citizen of the United States, and one year's residence in this, and in county six months, and have done military duty, or paid taxes; sends Members of Congress, 2; Electors, 4.

MISSOURI. Settled 1763, by French; 60,000 sq. miles; capital, Jefferson City; General Election first Monday in August; Legislature meet first Monday in November; Voter, citizen of the United States, one year's residence in this state next preceding the election, and three months in the county; sends Members of Congress, 2; Electors, 4.

TENNESSEE. Settled in 1765, by English; 40,000 square miles; capital, Nashville; Gen. Election first Tuesday in August; Legislature meet first Monday in October; Voter, citizen of the United States, and six months in county where his vote is offered; sends Members of Congress, 13; Electors, 15.

FLORIDA for near 200 years under Spain, was ceded to United States in 1819, and the East and West formed one Territory in 1822; St. Augustine is the oldest town in the United States; Tallahassee is the capital; Pensacola U. S. naval station.

MICHIGAN. Settled in 1670 by the French; contains 65,000 square miles; Indians, 30,000; capital, Detroit; Soil rich; Iron, copper and lead mines abundant; Qualifications, &c. not ascertained.

ARKANSAS. Settled by French from Louisiana, and formed from a part of Missouri in 1819; contains 57,000 square miles; admitted in the Union 1836; cap. Little Rock; Qualifications of voters, &c. not yet ascertained.

WISCONSIN. Settled by emigrants from other, principally New England States; bounded by lakes Michigan and Superior on the E., by Hudson Bay Co. Territories on the N., Illinois on the S., Mississippi and Iowa on the West; contains 80,000 square miles; capital, Madison.

IOWA. Territory, lies between Missouri and Mississippi rivers, bounded on the N. by Hudson Bay Co. Territories; contains 150,000 square miles; purchased of Sacs and Foxes, 1832; capital, Iowa City.

INDIAN or Western Territory extends from the western boundary of Arkansas and Missouri to Red river on the S., and the Puna and Platte or Nebraska on the N.; roughly estimated at about 275,000 square miles. The Western Territory, extending to the Rocky mountains, contains 340,000 square miles. Columbia or Oregon Territory, claimed by the United States, is about 850 miles long N. and S., 400 to 700 miles broad, and estimated to contain 350,000 sq. miles.

***TWO SENATORS are sent from each State, in addition to the preceding enumeration of Members of Congress.

MANUFACTURES.

Estimated Annual Value of Manufactures.—Aggregate value \$350,000,000. Cotton manufactures \$50,000,000. Woollen do. \$70,000,000. Leather do. \$40,000,000. Linen \$6,000,000. Hats, caps, &c. \$15,000,000. Glass \$5,000,000. Paper \$6,000,000. Soap and candles \$10,000,000. Spirits \$5,000,000. Cabinet-ware \$10,000,000. Iron \$50,000,000.

OUR TRADE WITH FRANCE.

In 1839 our exports to France amounted to 18,336,354 dollars. The principal article which we send to France is cotton. Of the aggregate export's just named, 13,323,142 dollars was in cotton, 710,063 dollars in tobacco, and 320,911 dollars in rice. Our imports from France during the same year, reached the sum of 32,531,321 dollars, of which 15,099,478 dollars was in silks; 1,379,976 dollars in wines; worsted and worsted

FOREIGN TRADE.

	Imports from	Exports to
Great Britain and dependencies, -	\$19,051,181	\$58,843,392
France and do. - -	18,087,149	16,252,413
Spain and do. - -	15,971,394	7,684,006
Netherlands and do. -	2,436,166	3,772,296
China - - - -	4,764,536	1,698,433
Mexico - - - -	3,500,709	2,164,097
Texas - - - -	165,718	1,247,880

stuff goods 1,500,000 dollars, linen 500,000 dollars, and manufactured cotton goods less than one million of dollars. This statement shows an excess of imports over exports, of 14,194,467 dollars for the year above named. In a comparison of the imports from France of 1839 with those of the previous year, it appears that they were nearly doubled—the difference in silks alone being nearly 10,000,000 dollars in 1839 over the imports of 1838—while the increase of exports during the same period was only 2,414,449.

GENERAL DISTANCES.

FROM WASHINGTON TO THE METROPOLIS OR CHIEF TOWN OF EACH STATE: ALSO, FROM EACH METROPOLIS TO EACH OF THE OTHERS.

* CAPITAL, or SEAT OF GOV.	Washington	Portland	Portsmouth	Burlington	Boston	Providence	New Haven	New York	Newark	Philadelphia	Wilmington	Baltimore	Richmond	Newbern	Charleston	Savannah	Mobile	Natchez	New Orleans	Nashville	Louisville	Cincinnati	New Albany	Vandalia	St. Louis
Washington	542	642	491	515	432	394	301	325	215	136	103	38	122	337	544	662	1033	1116	1203	714	530	497	594	781	856
Portland	51		51	188	110	130	241	317	317	405	139	504	664	879	1036	1204	1375	1068	1716	1235	1132	938	1136	1242	1316
Portsmouth	491	51		69	69	99	190	265	276	335	139	433	617	823	1035	1153	1524	1637	1694	1205	1081	907	1085	1191	1264
Burlington	188	173	173		190	190	230	300	379	412	477	637	852	1059	1177	1548	1661	1748	1229	1075	925	1079	1180	1255	
Boston	432	110	59	190		200	341	207	217	226	329	394	554	789	976	1094	1405	1578	1635	1146	1022	899	1026	1183	1253
Providence	394	150	59	200	40		169	179	232	291	336	516	731	938	1056	1427	1504	1597	1108	984	861	988	1152	1220	
New Haven	301	241	190	215	31	93		53	169	179	232	336	516	731	938	1056	1427	1504	1597	1108	984	861	988	1152	1220
New York	325	317	266	290	207	169	69		179	232	336	516	731	938	1056	1427	1504	1597	1108	984	861	988	1152	1220	
Newark	215	215	215	215	215	215	215	215		10	112	187	347	552	769	887	1258	1361	1418	929	815	741	809	966	1041
Philadelphia	136	103	103	103	103	103	103	103	103		79	112	197	357	562	779	897	1268	1361	1418	929	815	741	809	966
Wilmington	103																								
Baltimore	38																								
Richmond	122																								
Newbern	337																								
Charleston	544																								
Savannah	662																								
Mobile	1033																								
Natchez	1116																								
New Orleans	1203																								
Nashville	714																								
Louisville	530																								
Cincinnati	497																								
New Albany	594																								
Vandalia	781																								
St. Louis	856																								

GENERAL TRAVELLING ROUTES.

From Boston to St. Louis, Mo.

To New York	228	Miles
Philadelphia	87	315
Pittsburg	394	709
Louisville	587	1296
St. Louis	558	1854

From Boston to Augusta, Ga.

To New York	228	
Charleston	900	1128
Augusta, Ga.	136	1264

From New York to New Orleans.

To Charleston	900	
Augusta	136	1036
Mobile	540	1576
New Orleans	164	1740

From New York to St. Louis, Mo.

To Albany	145	
Buffalo	363	508
Detroit	317	825
Chicago, Ill.	286	1111
St. Louis	341	1452

From New York to St. Augustine, Fl.

To Charleston	900	
Savannah	108	1008
St. Augustine	309	1317

From New York to Chicago and Galena.

To Albany	145	
Buffalo	363	508
Detroit	317	825
Chicago, Ill.	286	1111
Galena	161	1272

From New York to Quebec.

To Albany	145	
Mon real	252	397
Quebec	170	567

From Philadelphia to New Orleans.

To Pittsburg, Pa.	394	
New Orleans	2003	2397

From Philadelphia to Mobile.

To Baltimore	115	
Washington	40	155
Milton, N. C.	247	402
Yorkville, S. C.	197	599
Abbeville	106	705
Millidgeville	115	820
Columbus	133	953
Mobile, Al.	253	1261

From Philadelphia to Nashville, Ten.

To Baltimore	115	
Wheeling	279	394
Louisville	495	889
Nashville	524	1413

From Philadelphia to Detroit.

To Pittsburg	394	
Beaver	28	422
L. Sandusky	199	621
Detroit	102	723

From Philadelphia to Niagara Falls.

To Easton, Pa.	56	
Elmira, N. Y.	158	214
Canandaigua	70	284
Niagara Falls	101	385

CONSTITUTION OF THE UNITED STATES.

We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this *Constitution* for the United States of America.

ARTICLE I.

Sec. 1. All legislative powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

Sec. 2. The House of Representatives shall be composed of members chosen every second year by the people of the several States, and the electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State Legislature.

No person shall be a Representative who shall not have attained to the age of twenty-five years, and been seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State in which he shall be chosen.

Representatives and direct taxes shall be apportioned among the several States which may be included within this Union, according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three-fifths of all other persons. The actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct. The number of Representatives shall not exceed one for every thirty thousand, but each State shall have at least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

When vacancies happen in the representation from any State, the executive authority thereof shall issue writs of election to fill such vacancies.

The House of Representatives shall choose their Speaker and other officers, and shall have the sole power of impeachment.

Sec. 3. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six years; and each Senator shall have one vote.

Immediately after they shall be assembled in consequence of the first election, they shall be divided as equally as may be into three classes. The seats of the Senators of the first class shall be vacated at the expiration of the second year, of the second class at the expiration of the fourth year, and of the third class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation or otherwise, during the recess of the Legislature of any State, the executive thereof may make temporary appointments until the next meeting of the Legislature, which shall then fill such vacancies.

No person shall be a Senator who shall not have attained to the age of thirty years, and been nine years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State for which he shall be chosen.

The Vice President of the United States shall be President of the Senate, but shall have no vote, unless they be equally divided.

The Senate shall choose their other officers and also a President *pro tempore*, in the absence of the Vice President, or when he shall exercise the office of President of the United States.

The Senate shall have the sole power to try all impeachments. When sitting for that purpose, they shall be on oath or affirmation. When the President of the United States is tried, the Chief Justice shall preside; and no person shall be convicted without the concurrence of two-thirds of the members present.

Judgment in cases of impeachment shall not extend further than to removal from office, and disqualification to hold and enjoy any office of honour, trust or profit under the United States: but the party convicted shall nevertheless be liable and subject to indictment, trial, judgment and punishment, according to law.

Sec. 4. The times, places and manner of holding elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by law make or alter such regulations, except as to the places of choosing Senators.

The Congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by law appoint a different day.

Sec. 5. Each house shall be the judge of the elections, returns and qualifications of its own members, and a majority of each shall constitute a quorum to do business; but a smaller number may adjourn from day to day, and may be authorized to compel the attendance of absent members, in such manner, and under such penalties as each house may provide.

Each house may determine the rules of its proceedings, punish its members for disorderly behaviour, and, with the concurrence of two-thirds, expel a member.

Each house shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may in their judgment require secrecy; and the yeas and nays of the members of either house on any question shall, at the desire of one-fifth of those present, be entered on the journal.

Neither house, during the session of Congress, shall, without the consent of the other, adjourn for more than three days, nor to any other place than that in which the two houses shall be sitting.

Sec. 6. The Senators and Representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the Treasury of the United States. They shall in all cases, except treason, felony, and breach of the peace, be privileged from arrest during their attendance at the session of their respective houses, and in going to and returning from the same; and for any speech or debate in either house, they shall not be questioned in any other place.

No Senator or Representative shall, during the time for which he was elected, be appointed to any civil office under the authority of the United States, which shall have been created, or the emolument whereof shall have been increased during such time; and no person holding any office under the United States, shall be a member of either house during his continuance in office.

Sec. 7. All bills for raising revenue shall originate in the House of Representatives; but the Senate may propose or concur with amendments as on other bills.

Every bill which shall have passed the House of Representatives and the Senate, shall, before it become a law, be presented to the President of the United States; if he approve he shall sign it, but if not he shall return it, with his objections, to that house in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If after such reconsideration two-thirds of that house shall

agree to pass the bill, it shall be sent, together with the objections, to the other house, by which it shall likewise be reconsidered, and if approved by two-thirds of that house, it shall become a law. But in all such cases the votes of both houses shall be determined by yeas and nays, and the names of the persons voting for and against the bill shall be entered on the journal of each house respectively. If any bill shall not be returned by the President within ten days (Sundays excepted) after it shall have been presented to him, the same shall be a law, in like manner as if he had signed it, unless the Congress by their adjournment prevent its return, in which case it shall not be a law.

Every order, resolution, or vote to which the concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and, before the same shall take effect, shall be approved by him, or being disapproved by him, shall be repassed by two-thirds of the Senate and House of Representatives, according to the rules and limitations prescribed in the case of a bill.

Sec. 8. The Congress shall have power—

To lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defence and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States;

To borrow money on the credit of the United States; To regulate commerce with foreign nations, and among the several States, and with the Indian tribes;

To establish a uniform rule of naturalization, and uniform laws on the subject of bankruptcies throughout the United States;

To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures;

To provide for the punishment of counterfeiting the securities and current coin of the United States;

To establish post-offices and post-roads;

To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries;

To constitute tribunals inferior to the Supreme Court; to define and punish piracies and felonies committed on the high seas, and offences against the law of nations;

To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water;

To raise and support armies; but no appropriation of money to that use shall be for a longer term than two years;

To provide and maintain a navy;

To make rules for the government and regulation of the land and naval forces;

To provide for calling forth the militia to execute the laws of the Union, suppress insurrections and repel invasions;

To provide for organizing, arming, and disciplining, the militia, and for governing such part of them as may be employed in the service of the United States; reserving to the States respectively, the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress;

To exercise exclusive legislation in all cases whatsoever, over such district (not exceeding ten miles square) as may, by cession of particular States, and the acceptance of Congress, become the seat of the Government of the United States; and to exercise like authority over all places purchased by the consent of the legislature of the State in which the same shall be, for the erection of forts, magazines, arsenals, dockyards, and other needful buildings; and

To make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the Government of the United States, or in any department or officer thereof.

Sec. 9. The migration or importation of such per-

sons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the year one thousand eight hundred and eight; but a tax or duty may be imposed on such importation, not exceeding ten dollars for each person.

The privilege of the writ of *habeas corpus* shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it.

No bill of attainder or *ex post facto* law shall be passed.

No capitation, or other direct tax shall be laid, unless in proportion to the *census* or enumeration herein before directed to be taken.

No tax or duty shall be laid on articles exported from any State. No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another; nor shall vessels bound to, or from, one State, be obliged to enter, clear, or pay duties in another.

No money shall be drawn from the Treasury but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time.

No title of nobility shall be granted by the United States; and no person holding any office of profit or trust under them, shall, without the consent of the Congress, accept of any present, emolument, office, or title, of any kind whatever, from any king, prince, or foreign State.

Sec. 10. No State shall enter into any treaty, alliance, or confederation; grant letters of marque and reprisal; coin money; emit bills of credit; make any thing but gold and silver coin a tender in payment of debts; pass any bill of attainder, *ex post facto* law, or law impairing the obligation of contracts, or grant any title of nobility.

No State shall, without the consent of the Congress, lay any imposts or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws; and the nett produce of all duties and imposts, laid by any State on imports or exports, shall be for the use of the Treasury of the United States; and all such laws shall be subject to the revision and control of the Congress. No State shall, without the consent of Congress, lay any duty of tonnage, keep troops or ships of war in time of peace, enter into any agreement or compact with another State, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

ARTICLE II.

Sec. 1. The executive power shall be vested in a President of the United States of America. He shall hold his office during the term of four years, and, together with the Vice President, chosen for the same term, be elected as follows:

Each State shall appoint, in such manner as the legislature thereof may direct, a number of electors equal to the whole number of Senators and Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or person holding an office of trust or profit under the United States, shall be appointed an elector.

The electors shall meet in their respective States, and vote by ballot for two persons, of whom one at least shall not be an inhabitant of the same State with themselves. And they shall make a list of all the persons voted for, and of the number of votes for each; which list they shall sign and certify, and transmit sealed to the seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted. The person having the greatest number of votes shall be the President, if such number be a majority of the whole number of electors appointed; and if there be more than one who have such majority, and have an equal number of votes, then the House of Representatives

shall immediately choose by ballot one of them for President; and if no person have a majority, then from the five highest on the list the said house shall in like manner choose the President. But in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. In every case, after the choice of the President, the person having the greatest number of votes of the electors shall be the Vice President. But if there should remain two or more who have equal votes, the Senate shall choose from them by ballot the Vice President.

The Congress may determine the time of choosing the electors, and the day on which they shall give their votes; which day shall be the same throughout the United States.

No person except a natural born citizen, or a citizen of the United States at the time of the adoption of this Constitution, shall be eligible to the office of President; neither shall any person be eligible to that office who shall not have attained to the age of thirty-five years, and been fourteen years a resident within the United States.

In case of the removal of the President from office, or of his death, resignation, or inability to discharge the powers and duties of the said office, the same shall devolve on the Vice President; and the Congress may by law provide for the case of removal, death, resignation, or inability, both of the President and Vice President, declaring what officer shall then act as President, and such officer shall act accordingly, until the disability be removed, or a President shall be elected.

The President shall, at stated times, receive for his services, a compensation, which shall neither be increased nor diminished during the period for which he shall have been elected; and he shall not receive within that period any other emolument from the United States or any of them.

Before he enter on the execution of his office, he shall take the following oath or affirmation:

"I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will, to the best of my ability, preserve, protect and defend the Constitution of the United States."

Sec. 2. The President shall be Commander-in-Chief of the army and navy of the United States and of the militia of the several States, when called into the actual service of the United States; he may require the opinion in writing, of the principal officer in each of the executive departments, upon any subject relating to the duties of their respective offices; and he shall have power to grant reprieves and pardons for offences against the United States, except in cases of impeachment.

He shall have power, by and with the advice and consent of the Senate, to make treaties, provided two thirds of the Senators present concur; and he shall nominate, and by and with the advice and consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the Supreme Court, and all other officers of the United States, whose appointments are not herein otherwise provided for, and which shall be established by law. But the Congress may by law vest the appointment of such inferior officers, as they think proper, in the President alone, in the courts of law, or in the heads of departments.

The President shall have power to fill up all vacancies that may happen during the recess of the Senate, by granting commissions which shall expire at the end of their next session.

Sec. 3. He shall, from time to time, give to the Congress information of the state of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient; he may, on extraordinary occasions, convene both houses, or either of them, and in case of disagreement between them, with respect to the time of adjournment, he may adjourn them to such time as he shall think proper; he

shall receive Ambassadors and other public Ministers; he shall take care that the laws be faithfully executed, and shall commission all the officers of the United States.

Sec. 4. The President, Vice President, and all civil officers of the United States, shall be removed from office on impeachment for, and conviction of, treason, bribery, or other high crimes and misdemeanors.

ARTICLE III.

Sec. 1. The judicial power of the United States shall be vested in one Supreme Court, and in such Inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the Supreme and Inferior Courts, shall hold their offices during good behaviour, and shall, at stated times, receive for their services, a compensation, which shall not be diminished during their continuance in office.

Sec. 2. The judicial power shall extend to all cases, in law and equity, arising under this Constitution, the laws of the United States, and treaties made, or which shall be made under their authority; to all cases affecting Ambassadors, other public Ministers and Consuls; to all cases of Admiralty and Maritime jurisdiction; to controversies to which the United States shall be a party; to controversies between two or more States; between a State and citizens of another State; between citizens of different States; between citizens of the same State, claiming lands under grants of different States; and between a State or the citizens thereof, and foreign States, citizens or subjects.

In all cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be a party, the Supreme Court shall have original jurisdiction. In all the other cases before mentioned, the Supreme Court shall have appellate jurisdiction, both as to law and fact, with such exceptions and under such regulations as the Congress shall make.

The trial of all crimes, except in cases of impeachment, shall be by jury; and such trial shall be held in the State where the said crimes shall have been committed; but when not committed within any State, the trial shall be at such place or places as the Congress may by law have directed.

Sec. 3. Treason against the United States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort. No person shall be convicted of treason unless on the testimony of two witnesses to the same overt act, or on confession in open Court.

The Congress shall have power to declare the punishment of treason; but no attainder of treason shall work corruption of blood, or forfeiture, except during the life of the person attainted.

ARTICLE IV.

Sec. 1. Full faith and credit shall be given in each State, to the public acts, records and judicial proceedings of every other State. And the Congress may, by general laws, prescribe the manner in which such acts, records and proceedings shall be proved, and the effect thereof.

Sec. 2. The citizens of each State shall be entitled to all privileges and immunities of citizens in the several States.

A person charged in any State with treason, felony, or other crime, who shall flee from justice, and be found in another State, shall, on demand of the executive authority of the State from which he fled, be delivered up, to be removed to the State having jurisdiction of the crime.

No person held to service or labour in one State, under the laws thereof, escaping into another, shall, in consequence of any law or regulation therein, be discharged from such service or labour; but shall be delivered up on claim of the party to whom such service or labour may be due.

Sec. 3. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the jurisdiction of any other State; nor any State be formed by the junction of two or more

States, or parts of States, without the consent of the Legislatures of the States concerned as well as of the Congress.

The Congress shall have power to dispose of and make all needful rules and regulations respecting, the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed, as to prejudice any claims of the United States, or of any particular State.

Sec. 4. The United States shall guarantee to every State in this Union, a republican form of government, and shall protect each of them against invasion; and, on application of the Legislature, or of the Executive (when the Legislature cannot be convened), against domestic violence.

ARTICLE V.

The Congress, whenever two thirds of both Houses shall deem it necessary, shall propose amendments to this Constitution, or, on the application of the Legislatures of two thirds of the several States, shall call a convention for proposing amendments, which, in either case, shall be valid, to all intents and purposes, as part of this Constitution, when ratified by the Legislatures of three fourths of the several States, or by conventions of three fourths thereof, as the one or the other mode of ratification may be proposed by the Congress: *Provided*, That no amendment which may be made prior to the year one thousand eight hundred and eight, shall in any manner affect the first and fourth clauses in the ninth section of the first article; and that no State, without its consent, shall be deprived of its equal suffrage in the Senate.

ARTICLE VI.

All debts contracted and engagements entered into before the adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

This Constitution and the Laws of the United States which shall be made in pursuance thereof; and all Treaties made, or which shall be made under the authority of the United States shall be the Supreme Law of the Land: and the Judges in every State shall be bound thereby, any thing in the Constitution or Laws of any State to the contrary notwithstanding.

The Senators and Representatives before mentioned, and the members of the several State Legislatures, and all Executive and Judicial officers, both of the United States and of the several States, shall be bound by oath or affirmation, to support this Constitution: but no religious test shall ever be required as a qualification to any office or public trust under the United States.

ARTICLE VII.

The ratification of the Conventions in nine States, shall be sufficient for the establishment of this Constitution between the States so ratifying the same.

Done in Convention, by the unanimous consent of the States present, the seventeenth day of September, in the Year of our Lord one thousand seven hundred and eighty-seven, and of the Independence of the United States of America the twelfth. In witness whereof, we have hereunto subscribed our names.

GEORGE WASHINGTON, *President,*
and *Deputy from Virginia.*

AMENDMENTS TO THE CONSTITUTION.

ARTICLE I.

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II.

A well regulated Militia being necessary to the security of a free State, the right of the people to keep and bear arms, shall not be infringed.

ARTICLE III.

No soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in time of war, but in a manner to be prescribed by Law.

ARTICLE IV.

The right of the people to be secure in their persons, houses, papers and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V.

No person shall be held to answer for a capital or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia when in actual service in time of war or public danger; nor shall any person be subject for the same offence, to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ARTICLE VI.

In all criminal prosecutions the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favour, and to have the assistance of counsel for his defence.

ARTICLE VII.

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

ARTICLE VIII.

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX.

The enumeration in the Constitution of certain rights, shall not be construed to deny or disparage others retained by the people.

ARTICLE X.

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

ARTICLE XI.

The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by citizens of another State, or by citizens or subjects of any foreign State.

ARTICLE XII.

The Electors shall meet in their respective States and vote, by ballot, for President and Vice President, one of whom, at least, shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice President, and of the number of votes for each, which lists they shall sign and certify, and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate; the President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted; the person having the greatest number of votes for President shall be the President, if such number be a majority of the whole number of Electors

appointed, and if no person have such majority, then from the persons having the highest numbers not exceeding three, on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President; but in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice President shall act as President, as in the case of the death or other Constitutional disability of the President. The person having the greatest number of votes as Vice President, shall be the Vice President, if such number be a majority of the whole number of Electors

appointed; and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators; and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice President of the United States.

ARTICLE XIII.

If any citizen of the United States shall accept, claim, receive, or retain any title of nobility or honour, or shall without the consent of Congress, accept and retain any present, pension, office or emolument of any kind whatever, from any Emperor, King, Prince, or foreign power, such person shall cease to be a citizen of the United States, and shall be incapable of holding any office of trust or profit under them, or either of them.

POISON ANTIDOTES.

For Oil of Vitriol or Aqua-Fortis give large doses magnesia and water, or equal parts soft soap and water.

For Oxalic Acid give magnesia, or chalk and water.

For Tartar Emetic give Peruvian bark and water, or a strong decoction of tea until the bark can be had.

For Saltpetre give an emetic of mustard and water; afterwards mucilages and small doses of laudanum.

For Opium or Laudanum give an emetic of mustard, and use constant motion, and if possible the stomach pump.

For Lunar Caustic give common salt.

For Corrosive Sublimate give the whites of eggs mixed with water, until free vomiting takes place.

For Arsenic doses of Magnesia are good, but freshly prepared Hydrated per Oxide of Iron is better.

Frost Bitten.—Spirits of Turpentine applied at once is a cure for freezing.

Insects taken into the stomach may generally be destroyed by a small quantity of

vinegar, to which salt may be added. For insects that may get into the ear, use a little salad oil.

Burns, Scalds or Freezing are cured by "Sovereign Water," an excellent remedy, if rightly applied. Made by 4 grains White vitriol, 1 grain Blue vitriol, 1 grain camphor, half grain saffron, mixed with 2 quarts soft water. Wrap the sores with linen rags and keep constantly wet.

An Ointment made of lime water and sweet oil is a soothing excellent remedy for burns, scalds, &c. Slake lime in water, let it settle and pour it off clear, and mix about equal portions of this water and sweet oil. See pages 20 and 24.

Cure for a Burn.—Wheat flour and cold water mixed to the consistency of soft paste, is an almost instantaneous cure for a burn, whether large or small. Renew before the first gets so dry as to stick.

Slippery Elm bark powdered makes an excellent healing poultice for burns, sores, &c., boiled with milk and about one-third bread.

AMOUNT OF APPROPRIATIONS,

Made at the 2d Session of the 26th Congress.

Partial support of government, Congress,	\$ 412,000
For civil and diplomatic expenses,	8,030,005
For the navy,	5,926,338
For the army,	5,441,916
For fortifications,	485,500
For the Military Academy,	160,522
For Pensions,	1,144,155
For the Indian Department,	875,280
For delegation of Western Seminoles,	15,000
For destitute Kickapoos, removal of Swan Creek and Black River Indians,	22,000
For survey of N. E. Boundary,	75,000
For lunatics in the District of Columbia,	3,000
For refunding duties on French ship Alexandre,	1,050
For Avery, Seltmarsh & Co.,	9,799
For private claims, (not pensions) amounts specified,	4,645

\$22,606,193

COMPARATIVE AGRICULTURAL STATISTICS.

According to the returns of the Marshals, by whom the late census was taken, the State of New York is behind Pennsylvania in the production of wheat to the

amount of about 2,000,000 bushels annually; while it excels Pennsylvania in the production of rye over 3,000,000 bushels, of Indian corn 2,500,000 bushels, of oats over 2,000,000 bushels, of buckwheat 300,000 bushels, of barley 2,300,000 bushels, of potatoes 21,000,000 bushels, wool nearly 1,000,000 pounds, hay nearly 2,000,000 tons, sugar over 8,000,000 pounds, and of products of the dairy over 8,000,000 dollars. In the production of wheat, Ohio exceeds Pennsylvania about 3,000,000 bushels, while Virginia is but about 1,500,000 bushels behind New York in that article. In Indian corn, Tennessee takes the lead of all the States, producing 42,500,000 millions of bushels yearly, North Carolina 34,500,000 bushels, Virginia about 34,000,000 bushels, Illinois 28,000,000, Michigan 22,000,000, Alabama 18,000,000, Missouri 15,000,000, Pennsylvania 13,500,000, and New York 10,000,000. Of neat cattle, New York possesses 2,642,438, Pennsylvania 146,418, Ohio 1,008,313. Of sheep New York has 5,381,225, Pennsylvania 3,396,431, Ohio 1,964,957, Vermont 1,393,420, Virginia 1,280,736. In the products of the orchard, New York and Vermont lead the other states nearly two to one; the former being to the amount of 1,732,357 dollars, the latter 1,109,387 dollars. In cotton, Mississippi bears the palm, producing yearly 289,838,818 pounds, Alabama 240,379,669 pounds, South Carolina 148,907,880 pounds, Georgia 134,322,755 pounds, Louisiana 87,640,185 pounds, Virginia 10,767,451 pounds.

For details, see pages 54 and 55.

COMMERCIAL WEIGHTS,

Compared with the most frequented ports according to the Dutch Standard Grains by which all weights are regulated.

	Equal to in	United States or London,	Amsterdam,	Cadiz,	Hamburg,	Havr,	Leghorn,	Petersburg,	Paris,
100 lbs. in									
United States or London	100	91 3-4	98 2-3	93 3-5	85 5-6	133 2-3	110 5-6	92 4-5	
Amsterdam	108 2-3	100	107 1-6	102	93 1-2	145 1-2	120 3-4	100 4-5	
Cadiz	101 1-2	93 1-3	100	95	87 1-6	135 3-4	112 1-2	94 1-7	
Hamburg	106 2-3	98	105	100	91 2-3	142 1-2	118 1-2	98 3-4	
Havr	116 2-3	107	114 2-3	109 1-6	100	155 2-3	129 1-6	108	
Leghorn	74 4-5	68 3-4	73 2-3	70	64 1-5	100	83	69 1-3	
Petersburg	90	84 4-5	88 2-3	84 1-3	77 1-4	120 1-4	100	83 1-2	
Paris	107 3-4	99	106 1-4	101	92 1-2	144	119 3-4	100	

FOREIGN MONEYS,

WITH THEIR VALUES, AS ESTIMATED AT THE CUSTOM-HOUSE BY LAW.

	Dollars.		Dollars.
Aux Cayes, 8 1-4 livres are equal to	1.00	Pezza of Leghorn, 0.90	76-100
Blue or current Dollar of Denmark, according to the exchange of London.		Piastre of Turkey, according to rate of exchange in London.	
Cayenne, 8 livres 5 sols of, are equal to	1.00	Pound Sterling of England, Scotland, and Ireland	4.80
Ducat of Naples	.80	Pound Sterling of Antigua	2.22
Franc of France	.18 3-4	" Barbadoes	3.20
Florin of Trieste	.48	" Bermuda	3.00
Genoa, 6 1-3 livres are taken as	1.00	" Halifax	4.00
Guadaloupe, 8 livres and 5 sols	1.00	" Jamaica	3.00
Guilder of Antwerp	.40	" New Providence	2.50
" Crefelt	.40	Rial Plate of Spain	.10
" Frankfort, and others of the 24 florin rate	.40	Velon of Spain	.05
" Holland	.40	Rix-dollar of Bremen	.77
" Nuremberg	.40	" Denmark	1.00
" St. Gall, 0.40 36-100		" Berlin, current, 0.68	29-100
" Trieste	.48	" Hamburg	1.00
" United Netherlands	.40	" Prussia, 0.68	29-100
Livre of France	.18 1-2	" Saxony	.69
" Geneva	.29	" Sweden	1.00
" Genoa, 6 1-3 livres	1.00	Ruble of Russia, according to the exchange between London and St. Petersburg.	
" Leghorn, 6 1-2 livres	1.00	Rupee of Bombay, Calcutta, and Sicca, each	.50
Louis d'or Rixdollar	.77	Rupee of Madras, 108=100 Sicca rupees.	
Marc Banco of Hamburg	.33 1-3	Star Pagoda of India	1.84
Milrea of Brazil, according to rate of exchange.		St Bartholomews, 8s. 3d.	1.00
Milrea of Madeira	1.00	St. Kitts, 9s. 0d.	1.00
" Portugal	1.24	Tale of China	1.48
Ounce of Sicily	2.46		

CLOTH MEASURE.

Place.	Measure.	Length of a single measure in English inches.	No. of each equal to 100 English yards.	Place.	Measure.	Length of a single measure in English inches.	Number of each equal to 100 English yards.
Amsterdam	Ell	27.07	132.988	Leghorn	Braccio	23.98	156.657
Batavia	Ell	27.00	133.333	Malta	Cauna	81.90	43.956
Bengal	Cubit	18.00	200.000	Naples	Cuna	83.00	43.273
Bremen	Ell	22.76	158.172	Netherlands	Ell	39.37	91.440
China	Covid	14.62	246.238	Prussia	Ell	26.25	137.142
Constantinople	Long Pic	27.90	129.032	Rio de Janeiro	Vara	43.50	82.758
Copenhagen	Ell	24.71	145.690	Rotterdam	Ell	27.20	132.352
England	Yard	36.00	100.000	Russia	Arsheen	28.00	128.571
"	Ell	45.00	80.000	Smyrna	Pic	27.00	133.333
Florence	Braccio	22.98	156.657	Spain	Vara	33.38	107.849
France	Aune	46.85	76.841	Sweden	Ell	23.36	154.109
"	Metre	39.37	91.445	Venice	Silk Braccio	24.81	145.102
Hamburg	Ell	22.58	159.433	Vienna	Silk Ell	30.66	117.416

AGRICULTURAL STATISTICS OF THE UNITED STATES,
ACCORDING TO THE CENSUS OF THE YEAR 1840.

STATES AND TERRITORIES.											
No. of horses and mules.	Number of neat cattle.	Number of sheep.	Number of swine.	Poultry—value thereof.	No. of bushels of wheat.	No. of bushels of barley.	No. of bushels of oats.	No. of bushels of rye.	Bushels of buckwheat.	Bushels of Indian corn.	Pounds of wool.
Maine	327,255	649,264	117,386	\$2,171	848,166	355,161	1,076,409	137,941	51,543	950,528	1,455,561
New Hampshire	261,088	608,891	120,167	97,862	442,954	121,400	1,198,989	395,530	115,463	1,252,572	1,260,988
Vermont	350,160	1,393,426	227,952	176,437	632,293	55,635	2,342,497	447,318	158,609	1,047,601	3,257,795
Massachusetts	271,760	378,226	143,021	640,295	188,913	168,419	1,899,530	541,956	87,010	1,809,893	1,055,591
Rhode Island	8,074	36,700	29,689	61,492	3,088	63,790	1,699,625	34,521	2,979	1,255,855	173,680
Connecticut	34,751	323,969	408,985	176,659	86,980	33,789	1,456,523	736,765	299,470	1,468,538	893,675
New York	476,115	5,381,225	1,216,963	2,733,029	11,853,507	2,498,170	20,728,738	2,984,913	2,224,338	10,495,142	4,012,144
New Jersey	69,769	219,548	259,051	412,487	774,023	12,601	3,066,516	1,636,576	866,970	4,311,381	396,573
Pennsylvania	338,565	1,146,418	1,450,531	1,093,172	13,029,856	178,100	18,053,477	6,233,447	1,971,928	13,696,619	3,076,783
Delaware	14,421	54,883	74,228	47,465	215,165	6,260	837,405	824,353	71,299	2,089,361	64,404
Maryland	240,432	262,809	1,219,159	219,159	3,511,433	3,594	3,579,950	824,353	74,848	8,470,165	500,499
Virginia	1,008,313	1,280,736	1,916,230	752,467	10,066,809	14,520	13,297,351	1,357,170	241,643	34,646,686	2,672,044
North Carolina	573,840	232,664	888,513	590,594	705,925	3,367	1,446,158	44,530	72	14,721,785	289,202
South Carolina	755,060	254,947	1,282,314	473,158	1,732,956	13,345	1,290,048	69,851	269	17,329,797	363,340
Georgia	1,196,204	1,964,957	2,084,268	730,720	16,214,260	207,590	13,993,624	801,943	681,335	33,954,162	3,650,970
Ohio	777,380	748,459	2,795,630	581,531	4,547,273	4,758	6,770,116	297,033	6,187	42,467,349	1,029,526
Kentucky	327,526	348,708	100,056	273,314	105	-	110,013	1,812	-	5,990,473	49,524
Tennessee	99,067	607,590	144,372	829,220	746,108	6,682	1,437,992	36,632	52	18,680,663	173,400
Louisiana	623,157	128,376	701,160	369,481	196,576	1,544	588,604	15,642	61	19,161,231	188,839
Alabama	109,227	367,623	995,739	230,283	946,077	9,771	1,937,573	63,165	16,317	15,591,432	462,644
Missouri	157,578	298,235	1,072,813	383,228	4,154,256	25,778	6,875,419	127,586	49,681	28,008,051	1,202,209
Indiana	614,489	673,952	1,580,051	330,963	2,740,380	68,455	4,558,507	95,965	63,950	22,116,627	600,366
Illinois	604,693	377,963	1,394,286	330,963	2,740,380	68,455	4,558,507	95,965	63,950	22,116,627	600,366
Michigan	195,186	41,877	393,004	83,549	112,200	85	167,452	5,925	88	3,931,149	68,034
Arkansas	39,085	15,354	104,891	17,101	154,737	739	216,385	3,787	6,217	1,326,241	23,028
Florida Territory		572	4,673	1,557	12,147	294	15,751	5,081	272	39,386	707
Wisconsin Territory	37,449										
Iowa Territory	10,801										
District of Columbia	2,145										

AGRICULTURAL STATISTICS OF THE UNITED STATES, ACCORDING TO THE CENSUS OF THE YEAR 1840.

AGRICULTURAL STATISTICS FOR 1840.

55

(Table continued.)	STATES AND TERRITORIES.	No. of bushels of potatoes.	Number of tons of hay.	Tons of hemp and flax.	No. of pounds of tobacco.	No. of pounds of rice.	No. of pounds of cotton.	Pounds of silk cocoons.	Pounds of sugar made.	Value of the products of the dairy.	Value of the products of the orchard.	Gallons of wine made.	Value of number produced.
	Maine	10,392,380	691,053	38	..	..	..	..	238,230	\$1,493,713	\$148,249	2,236	\$1,808,633
	New Hampshire	6,231,901	496,647	53,040	..	..	..	406	1,097,398	1,585,955	220,056	94	401,358
	Vermont	8,206,784	734,047	24	585	..	..	4,233	4,220,541	4,892,097	389,177	100	366,146
	Massachusetts	5,385,632	569,425	23,132	64,955	..	..	1,741	579,227	2,273,219	389,177	1,905	476,845
	Rhode Island	904,773	63,417	lb. 383	307	..	..	358	50	218,922	32,098	745	44,455
	Connecticut	3,414,227	428,160	147,481	471,637	..	..	17,388	51,764	1,365,653	302,953	5,243	147,831
	New York	30,000,508	3,160,916	763	6,567	..	..	2,103	10,093,991	10,497,032	1,732,357	14,700	3,788,173
	New Jersey	2,074,118	326,496	33,710	1,922	..	..	1,866	56	1,315,676	562,863	9,416	297,856
	Pennsylvania	8,626,923	1,199,963	170,760	350,861	..	..	278,939	1,555,977	2,271,420	554,957	19,182	566,607
	Delaware	900,712	21,880	602	34	..	347	1,442	..	232,446	25,914	529	6,562
	Maryland	1,038,919	110,836	34	18,916,012	..	5,673	2,290	36,266	446,558	114,339	7,623	230,985
	Virginia	2,873,470	288,740	92,123	74,157,841	2,610	10,767,451	3,188	1,530,541	1,454,861	668,921	37,233	516,412
	North Carolina	..	..	..	..	..	..	..	..	..	..	..	..
	South Carolina	2,697,713	20,008	35	51,518	59,929,671	148,907,880	2,210	30,000	577,849	52,276	643	504,884
	Georgia	1,184,386	9,264	1,787	184,551	12,199,412	134,322,755	3,208	231,140	552,505	135,446	6,319	106,066
	Ohio	5,600,566	1,024,803	252,520	6,023,309	..	..	4,316	6,909,257	1,701,602	461,191	161,844	300,242
	Kentucky	..	..	..	..	..	..	..	..	..	..	..	..
	Tennessee	2,373,034	30,512	45,053	36,542,448	7,729	135,250,308	1,163	251,745	930,623	366,767	653	200,266
	Louisiana	845,935	36,308	..	120,174	3,604,534	87,640,185	317	249,937,730	150,818	11,869	2,884	111,405
	Alabama	1,560,700	13,933	..	214,307	108,181	240,379,669	1,351	10,155	197,449	53,161	11,253	233,828
	Mississippi	1,538,628	171	16	83,451	273,190	259,838,818	85	70	989,177	4,119	12	152,094
	Missouri	684,491	44,870	20,071	8,430,727	..	300,338	70	232,560	63,230	76,305	92	68,150
	Indiana	1,548,190	191,158	97,657	1,821,406	..	..	379	3,720,186	751,441	90,354	3,495	213,471
	Illinois	1,956,887	156,442	50,326	415,706	29,421	199,958	1,171	394,446	433,573	118,638	471	198,070
	Michigan	..	..	..	..	..	..	..	..	..	..	..	..
	Arkansas	290,887	579	1,039	143,389	927	23,857,192	90	2,535	34,577	7,454	..	161,685
	Florida Territory	..	..	..	..	..	..	..	..	..	..	..	..
	Wisconsin Territory	234,063	17,953	313	12,676	..	..	..	41,450	23,609	50	..	50,305
	Iowa Territory	..	..	..	..	..	..	..	..	..	..	..	..
	District of Columbia	12,005	1,231	..	55,550	..	..	576	..	75,566	3,507	25	..

31,400 barrels of tar, pitch, turpentine, and rosin. 16,500 tons of pot and pearl ashes, principally in N. York, Ohio, and Indiana. 1,083,100 pounds of hops, and 698,000 pounds of wax.

TABLES OF POPULATION.

STATES AND TERRITORIES.	Length.	Breadth.	Square Miles.	POPULATION AT DIFFERENT PERIODS.				
				1790.	1800.	1810.	1820.	1830.
Maine - - - - -	235	136	31,960	96,540	151,719	228,705	298,335	399,462
New Hampshire - - -	160	58	9,230	141,885	183,858	214,460	244,161	269,533
Vermont - - - - -	157	65	10,205	85,539	154,465	217,895	235,764	280,679
Massachusetts - - -	130	60	7,800	378,787	422,845	472,040	523,287	610,014
Rhode Island - - -	47	29	1,363	68,825	69,122	76,931	83,059	97,210
Connecticut - - - -	90	53	4,770	237,946	251,002	261,942	275,248	297,711
New York - - - - -	280	165	46,200	340,320	586,050	959,049	1,372,812	1,913,508
New Jersey - - - -	138	50	6,900	184,139	211,149	245,562	277,575	320,779
Pennsylvania - - -	280	157	43,960	434,373	602,548	810,091	1,049,458	1,347,672
Delaware - - - - -	94	22	2,068	59,094	64,273	72,674	72,749	76,739
Maryland - - - - -	119	91	10,829	319,728	349,692	380,546	407,350	446,913
Virginia - - - - -	320	200	64,000	747,610	886,149	974,622	1,065,366	1,211,272
North Carolina - -	362	121	43,802	393,751	478,103	555,500	638,829	738,470
South Carolina - -	188	160	30,080	240,073	345,591	415,115	502,741	581,458
Georgia - - - - -	300	194	58,200	82,548	162,686	252,433	340,989	516,567
Alabama - - - - -	275	185	50,875	- - -	8,850	31,502	127,901	308,997
Mississippi - - - -	275	165	45,375	- - -	- - -	- - -	75,448	136,806
Louisiana - - - - -	240	200	48,000	- - -	- - -	- - -	153,407	215,575
Tennessee - - - -	430	104	44,720	35,691	105,602	261,727	422,813	684,822
Kentucky - - - - -	289	135	39,015	73,677	220,959	406,511	564,317	688,844
Ohio - - - - -	210	185	38,850	3,000	45,365	230,760	581,434	937,679
Indiana - - - - -	240	145	34,800	- - -	4,875	24,520	147,178	341,582
Illinois - - - - -	365	162	59,130	- - -	215	12,282	55,211	157,575
Missouri - - - - -	272	222	60,384	- - -	- - -	19,783	66,586	140,074
Michigan - - - - -	640	505	177,750	- - -	551	4,762	8,896	31,260
Arkansas - - - - -	500	242	121,000	- - -	- - -	1,062	14,273	30,383
Florida Territory - -	385	150	57,750	- - -	- - -	- - -	- - -	34,723
Missouri Territory -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
District of Columbia -	10	10	100	- - -	14,093	24,023	33,039	39,858

CENSUS OF 1840.

STATES AND TERRITORIES.	White persons.	Free col- oured persons.	Slaves.
Maine, - - - - -	500,443	1,353	
New Hampshire, - -	283,951	529	1
Massachusetts, - -	728,932	8,534	
Connecticut, - - -	301,858	8,111	54
Rhode Island, - - -	105,593	3,239	5
Vermont, - - - - -	291,130	718	
New York, - - - -	2,382,571	50,261	3
New Jersey, - - -	350,724	20,970	658
Pennsylvania, - - -	1,619,115	50,571	31
Delaware, - - - -	58,581	16,926	2,613
Maryland, - - - -	431,441	52,000	105,000
Virginia, - - - -	735,812	48,425	447,207
North Carolina, - -	484,172	22,752	246,186
South Carolina, - -	259,002	8,279	327,158
Georgia, - - - - -	363,303	2,353	253,508
Alabama, - - - - -	288,947	1,833	188,664
Mississippi, - - -	178,967	1,367	195,765
Louisiana, - - - -	112,149	22,197	115,292
Tennessee, - - - -	629,492	5,407	188,168
Kentucky, - - - -	591,658	7,302	183,040
Ohio, - - - - -	1,498,593	17,102	
Indiana, - - - - -	676,296	7,018	
Illinois, - - - - -	423,330	3,120	184
Missouri, - - - -	277,357	1,433	48,941
Arkansas, - - - -	77,815	- - -	7,000
Michigan, - - - -	211,001	703	1
Florida, - - - - -	8,147	521	5,334
Wisconsin, - - - -	30,506	178	8
Iowa, - - - - -	42,864	153	18
Dist. of Columbia -	30,657	8,361	4,694

Slaves in 1830, 2,000,990—in 1840, 2,369,953. Free coloured in 1840, 371,606.

POPULATION OF OUR CITIES
AND VILLAGES.

	1840.	1830.	Increase.
New York - - - -	312,234	202,589	109,645
Philadelphia - - -	258,832	188,797	70,135
Baltimore - - - -	101,378	80,625	21,753
Boston - - - - -	84,401	61,392	23,019
Brooklyn - - - - -	36,283	12,903	23,380
Cincinnati - - - -	46,382	24,831	21,551
St. Louis - - - - -	24,585	5,852	18,783
Washington - - - -	22,777	18,827	3,950
Pittsburg - - - - -	21,296	12,542	8,754
Wilmington, Del. -	8,367	6,663	1,704
Middleton - - - -	7,210	6,892	313
Bridgeport - - - -	4,570	2,800	1,770
Norwich - - - - -	7,239	5,179	2,060
New London - - - -	5,528	4,356	1,172
New Haven - - - -	14,390	10,678	3,712
Hartford - - - - -	12,793	9,789	3,004
New Orleans - - - -	102,191	50,103	52,088
Savannah - - - -	11,214	7,303	3,911
Newburyport - - -	7,161	6,388	773
Wilmington, N. C. -	4,268	2,700	1,568
Natchez - - - - -	4,826	2,790	2,036
Newport - - - - -	8,321	8,010	311
Buffalo - - - - -	18,356	6,321	12,035
Portland - - - - -	15,218	12,601	2,617
Gardiner - - - - -	5,044	3,709	1,335
Canandaigua - - -	5,653	5,162	491
Troy - - - - -	19,372	11,405	7,967
Dover, N. H. - - -	6,438	5,449	989
Providence - - - -	22,042	16,832	5,210
Portsmouth, N. H. -	7,884	8,082	Decrease. 198
Charleston - - - -	29,253	30,289	1,036

THE POPULATION IN

1790 was	3,729,326	1820 was	9,638,166
1800 " "	5,309,753	1830 " "	12,856,407
1810 " "	7,239,903	1840 " "	17,141,876

COOKERY.

THE GOLDEN RULE.

It may be laid down as a fundamental principle and one that cannot be too constantly kept in mind, that the more compounded any kind of food is, the more difficult it will be of digestion; the more corrupt the juices which are prepared from it, and therefore the more positively injurious to the digestive organs, to the blood, and to the health.

NUTRIMENT.

Animal Food has more nutriment than vegetable when estimated by bulk, but far less when compared by weight, the true criterion, as the following chemical analysis correctly shows:

100 lbs.	Wheat	contain	85 lbs.	nutriment.
Do.	Rice	"	90	"
Do.	Rye	"	80	"
Do.	Barley	"	83	"
Do.	Beans	"	89 to 92	"
Do.	Peas	"	93	"
Do.	Meat, av.	"	35	"
Do.	Potatoes	"	25	"

Beets, carrots, greens, turnips, &c. contain a much smaller proportion.

By Roasting beef loses 22 per cent. of its weight, mutton 24, lamb 22, goose 19, turkey 20, duck 27, chickens 14.

By Boiling beef loses 15 per cent. of its weight, mutton 10, turkey 16, chicken 13, ham 6.

MEATS.

All meat should be cooked till it is separated from the blood, and the fibres become soft and easy of digestion.

Meat should be eaten sparingly by children, and by those who take but little exercise, and should be entirely abstained from when there is any symptom of excited action or fever.

Boiling is the most economical mode of cooking meat, if the liquid is used as it should be for soup or broth. The slower meat is boiled the more tender it is. Ten pounds should boil or simmer about three hours, in cold weather longer; allowing water enough to cover the meat well. If it is very salt, soak it for half an hour in lukewarm water.

Baking is well for legs, loins, &c., but bad for lean thin pieces which shrivel away.

Roasting is most wasteful, though some pieces seem best adapted for this mode. Wash the meat well, dry with a clean cloth, cover the fat with pieces of white paper tied with thread until half an hour before taking up. Turn often. Pour off the first dripping, which being liquid fat is unhealthy, and make gravy by adding flour and water. Twenty minutes to each pound of meat is the rule for roasting.

Stew Beef, ten pounds in five quarts water, with two or three onions and some cloves, a few carrots cut in quarters, herbs, and such other seasoning as you like. Strain the gravy and add a little flour and butter.

Pork is not a healthy food, though well enough for those who labour hard. It should never be eat unless thoroughly cooked.

Mutton is the healthiest meat that is eaten.

Veal is a delicate meat, but to be easy of digestion must be done tender. The knuckle stewed with herbs for about three hours is an excellent dish.

Young Turkeys may be known by their soft bills and toes. Young geese by fat white breast, yellow feet, and web of the foot thin and tender.

Stuffing or dressing for fowls is made with grated bread crumbs, minced suet or butter, sweet marjoram or thyme, nutmeg or other spice, pepper, salt, and beaten egg. Fine cut or grated ham may be added, and potatoes. A good stuffing is made of potatoes alone with suitable seasoning.

Boiled Turkey.—Stuffing of bread, parsley, lemon peel, oysters, and an onion. Season with salt, pepper, nutmeg, and one egg mixed with a bit of butter; fasten up the skin over the crop, put the turkey in cold water, boil slowly, skim well, and let it simmer for two hours—longer if very large. Chop the liver, &c. for the gravy.

Fowls and chickens may be done the same way, only in less time. Boil till tender. Seasoning should be according to taste.

Fricassee.—Wash and cut the chicken into joints, scald and take off the skin, stew for an hour with a sliced onion, parsley, lemon peel, salt and pepper—or season to suit yourself. Add pint of water and bit of butter, and just before serving up add the yolk of two eggs beaten up with a tea cup of cream, stirring it in gradually.

In drawing poultry be careful not to break the gall.

Chicken Baked in Rice.—Cut into joints, season, lay it in a dish lined with ham or bacon, add minced onion, a pint of water, and fill up with boiled rice, pressed down as much as the dish will hold. Cover with a crust of flour, and bake one hour in a slow oven.

Geese, like pork, should never be brought to the table unless thoroughly cooked.

SOUPS.

Soups are positively injurious to weak stomachs, and to Dyspeptics. The experiments of Dr. Beaumont, with gastric juice, prove soups to be the most injurious and indigestible food that is taken into the stomach—the reason being that before the process of digestion can go on the water must be separated from the nourishment, and hence double duty is imposed on the digestive powers. Soups occasionally eaten, and for healthy stomachs may be well enough. For children soups do well, with sufficient bread, rice and vegetables in the liquid.

Save the liquor in which all meats are boiled, except smoked meat, for soup or gravy, as it contains much of the essence of the meat.

Mock Turtle Soup is made of calves head, boiled an hour gently in 4 quarts water well skimmed. Take it out, cut the meat in pieces an inch square. Slice and fry in butter 2 lbs. leg of beef and 2 lbs. of veal—slice 2 onions, and add all to the liquor, with the bones also; then 2 onions, 2 ounces green sage, some parsley, tea-spoon ground allspice, 2 do. black pepper, salt, lemon peel: stew gently for five hours; strain, and when cold take off the fat. Part the liquor and meat from the head, add Madeira or Claret if you choose, mix a spoonful of flour and a cup of butter with a little of the broth, and stir it in. Then stew an hour till meat is tender, when done add tea-spoon Cayenne, the yolks of 12 eggs boiled hard, and 12 force meat balls, if liked.

Calves feet make a good soup in imitation of the above; boiling four in two quarts water; adding such of the other ingredients as you choose.

Vegetable Soup.—12 onions, 6 turnips, 2 celery, 4

carrots, 2 ounces butter; stew gently till soft; then add 4 quarts seasoned gravy soup, made of roast beef bones, stew 4 or 5 hours, and skim.

Rice Soup.—Boil scrag end of neck veal in 4 quarts water, with 1 lb. lean ham, skim well and season, after boiling down one-half strain it, add 1 lb. rice which boil till tender.

Soup for Invalids.—Cut small 1 lb. mutton or beef, stew gently in 2 quarts water, skim well, when reduced to a pint add salt, and take tea cup full at a time

PUDDINGS.

Apple Pudding.—Put in a deep pan or dish a layer of apples, pared and cut up, then a layer of bread crumbs, then apples again and bread alternately until the dish is full, adding sugar, and interspersing with pieces of butter, and seasoning with spice. Bake about an hour. Good with cream or without.

Rice Pudding.—6 ounces rice boiled in 1 quart milk till tender, stirring it often, add tea-cup sugar, half cup butter, 3 eggs well beat, season and stir till quite smooth. Bake in buttered dish about an hour. Add an egg more and 1 pint milk, if you wish it like custard.

Boil the above if preferred, adding fruit to suit taste, and serve with butter and sugar.

Sweet Potatoe.—Boil and mash them smooth, to 2 cups full add 1 cup sugar, 1 of butter, 5 eggs, 1 nutmeg, lemon rind, and bake with under crust.

Plain Bread Pudding.—Pour quart boiling milk on 4 oz. bread crumbs, cover till cold, then add 3 beat eggs, tea-cup sugar, lemon peel, cinnamon, bake in buttered dish, and serve with sweet sauce.

Custard Pudding.—1 table-spoon flour, 1 pint cream or new milk, 3 eggs, rose water, ounce butter, loaf sugar and nutmeg, and bake in buttered dish half an hour.

Damson Pudding.—Make a batter of 3 eggs, pint milk, 4 large spoons flour, 4 do. sugar, stone a pint of damsons, mix in batter, and boil hour and half.

Plum Pudding.—Chop half pound suet, stone half pound raisins, wash half pound currants, 4 ounces each of bread and flour, 4 eggs well beat, a little cinnamon, mace and nutmeg, spoonful salt, 4 ounces sugar, an ounce each of citron and candied lemon. Beat egg and spices well together, then add milk and other ingredients by degrees, flour a fine linen cloth, pour in the batter, and in tying allow room to swell. Boil in six quarts water 6 or 7 hours, filling up with hot water as it boils away. Mix an hour or two before cooking.

BREAD.

Bread making is an art, the importance of which is too frequently overlooked or underrated. Heavy, sour, hard bread should never be tolerated, because good bread is more palatable, more healthy, and it should be borne in mind, is really much less expensive. There is great saving in baking bread at home, and this saving is greatest when flour is cheapest.

Good flour and good yeast are requisites, but the goodness of the bread depends much on the kneading: the more the dough is turned and pressed and worked the lighter and better the bread will be.

Proportions.—2 gallons flour, half pint strong fresh yeast, if home-made add more.

The Process.—Make a hole in the flour, in which pour the yeast mixed with half a pint warm water. Stir in the flour round the edge of this liquid with a spoon to form a thin batter. After stirring it well for two minutes, sprinkle a handful of flour over the top of this batter, lay a warm cloth over it, and set it to rise in a warm place. When it rises so as to crack on the top add four spoonfuls fine salt, and begin to form the mass into dough, pouring as much soft, lukewarm water as is necessary to make the flour mix with the batter. When the flour and batter are thoroughly mixed, knead and work the whole till it is light and stiff. Roll into a lump, sprinkle dry flour over it,

cover and put in a warm place when in half an hour it will rise enough for baking.

The quality depends much on the time of putting the dough in the oven. Dough readily runs into three stages of fermentation. It should be put in the oven during the first or *saccharine*, when if sufficiently baked it will be sweet and wholesome. It afterwards becomes sour and heavy. If put in too soon, it will be light and as tasteless as saw dust.

Good bread is marked by fine pores and a sort of net work of uniform appearance.

Keep bread wrapped in a coarse towel, and where it will not dry up, or in a tight box.

If sour, from being mixed over night, melt a teaspoon of pearl ash in a little milk-warm water, sprinkle it over the dough, and in half an hour knead it again.

Frozen dough is spoiled.

Indian is a good addition to wheat, and requires more water, or make mush of it and then mix in.

The bitterness of yeast may be remedied by putting in a little charcoal and then straining it.

Rye and Indian Bread.—Mix 2 quarts of each with 3 pints boiling milk, table-spoon salt, and stir well. Let it stand till lukewarm, then stir in half pint good yeast. Knead to a stiff dough and put to rise near the fire. When the top is cracked over, make into two loaves and bake moderate two and half hours.

Common Yeast.—Boil large handful hops in two quarts water 20 minutes. Strain and pour the liquid into 3 pints flour. Stir in half pint strong yeast. Its strength is increased by 5 tea-spoons brown sugar or 5 large spoons molasses. Cork the bottles loose till next day, and then tight.

If turning sour put tea-spoon pearl ash in each bottle.

Another.—Boil, peel and mash mealy potatoes, which reduce with water or ale thin as common yeast. To every pound add 2 ounces coarse sugar, and when just warm stir in two spoons of yeast. Keep warm till fermentation is over and in 24 hours fit for use. Let sponge eight hours before baking.

CAKES,

Should be used sparingly.

In making cakes dry the flour before a fire, sift and weigh it. Wash and dry currants, stone raisins, pound sugar, roll it fine and sift. Dry spices first, then pound and sift. Pour hot water over almonds to remove the skin, then throw them in cold water. Pare lemon and orange peel, and then pound with a little sugar. Wash butter in cold water. The yolk and white of eggs should be separated and beaten the last thing.

Sponge Cake.—1 lb. pulverized loaf sugar, 9 eggs, 12 ounces flour. Beat eggs half an hour, then beat eggs and sugar together to a foam. Stir in the flour lightly, add a little nutmeg and cinnamon. Bake half an hour in tins buttered and filled only half full. If a single cake, bake an hour. A hot oven, but not so hot as to scorch.

Another.—1 lb. flour, three quarters pound pulverized loaf sugar, 7 eggs, grated peel and juice of a lemon, a table-spoon rose water. Beat all an hour, butter a tin, line it with paper also buttered, sift sugar over top, and bake an hour.

Seed Cake.—1 lb. flour, 12 oz. fine sugar well beat with 7 eggs, 1 oz. pounded caraway seeds, two large spoons sour cream and tea-spoon pearl ash. Bake if one cake an hour, in small tins 15 minutes.

Macaroons.—Beat the white of 8 eggs to froth, add 2 lbs. fine loaf sugar, 1 lb. blanched almonds pounded to paste, with rose water. Beat all to thick paste. Place drops on a buttered tin far enough apart to spread. Bake 10 minutes in moderate oven.

Rice batter Cakes.—Boil rice soft and thin it with quart milk, add 3 eggs, salt, and sweeten or not as preferred. Bake same as buckwheat cakes or in tins.

Rice Cakes.—Beat 8 yolks and 4 whites of eggs, add 6 oz. powdered sugar, and lemon peel grated. Stir in

half pound ground rice, and beat all half an hour. Bake in buttered tins 20 minutes.

Sugar Cakes.—Half lb. flour, quarter butter, quarter sifted sugar—mix the flour and sugar, rub in the butter; add yolk of egg beat, table-spoonful of cream. Make paste, roll out in small cakes, and bake on floured tin.

Breakfast Cake.—1 quart flour, 4 oz. butter, mix with milk, 3 large spoons yeast, make into biscuits and prick with a fork, and bake in about 20 minutes. If you have sour milk omit yeast and put tea-spoon pearl ash in the milk, which pour in while effervescing.

Tea Cake.—Rub an oz. butter in lb. flour, with a beaten egg and half tea-spoon salt. Wet with warm milk—make it stiff, roll thin, cut with top of tumbler and bake quick.

Light Cake—Pound and half sugar, half butter, rub in 2 lbs. flour, 1 glass rose water, 8 eggs well beaten, half nutmeg, and bake in cups.

Hard Gingerbread.—Rub half lb. butter in one of flour—rub in half lb. sugar, two table-spoons ginger—spoonful rose water; work it well, roll out, and bake in flat pans about half hour moderate.

Common Gingerbread.—One and half lb. flour, rub in half lb. butter, add pint molasses, tea-spoon pearl ash, and ginger to the taste; roll out thin and bake on buttered tins.

Indian Batter Cakes.—2 quarts milk, 1 quart Indian meal, 1 tea-cup wheat flour, 3 eggs, well beat, the whites separate, tea-spoonful salt. Bake on griddle, same as buckwheat.

Superior Johnny Cake.—Take 1 quart of milk, 3 eggs, 1 tea-spoonful saleratus, 1 tea-cup wheat flour and Indian meal, sufficient to make a batter of the consistency of pancakes. Bake quick, in pans previously buttered, and eat warm, with either butter or milk.

A good Cake.—4 cups each of flour and Indian meal, 1 cup molasses, 2 tea-spoons saleratus, some salt. Make batter and bake.

Dover Cake.—Half pint milk, half tea-spoon pearl ash, dissolved in little vinegar, 1 lb. flour, sifted, 1 lb. powdered sugar, half lb. butter, 6 eggs, 1 glass rose-water, spice to suit taste. Stir sugar and butter to a cream, and add the spice. Beat eggs light, and stir them into the butter and sugar with the flour. Add the milk, and stir all hard. Butter a large pan, and put in the mixture. Bake two hours or more in a moderate oven. If not thick, an hour or an hour and a half will do. Wrap in a thick cloth, and keep from air, and it will keep good for two weeks.

Ginger Loaf.—A pint Molasses, a pint buttermilk, a tea-spoon saleratus dissolved in it, four eggs, flour till stiff as for pound cake, add ginger and spices.

Jenette Cakes.—Quarter of sugar, quarter of butter, beat to a cream to 2 eggs, tea-spoon saleratus, tea-cup milk, mix in enough flour, roll out thin, cut with a tumbler, bake on buttered tin 15 minutes.

Frost or Icing for Cakes.—Beat the whites of 4 eggs to a stiff foam, add gradually three-quarters of a pound best loaf sugar pounded and sifted, mix juice of half a lemon, or tea-spoon rose-water. Beat the mixture till very light, place the cake near the fire, pour over the icing, and smooth with a knife or back of a spoon.

Breakfast Batter Cakes.—1 pint milk, 3 eggs, large spoonful butter, 2 do. yeast, and flour enough to make stiff batter; let them stand to rise all night where it is not too warm, and bake on a griddle or in tin rings.

Tea Batter Cakes.—Beat 2 eggs, add half pint milk and tea-cup cream, half tea-spoon pearl ash, tea-spoon salt, with nutmeg, cinnamon or rose-water. Add flour till thick and smooth. Bake brown on griddle, or in a buttered pan.

Pan Cakes may be made very good by frying the above batter in hot lard.

Rice Pudding.—1 quart milk, quarter pound rice, 1 ounce sugar, tea-spoon ginger. Swell the rice with water, and bake an hour.

ADDITIONAL.

Baked Mutton Chops.—Cut neck of mutton into chops, season, lay it in a buttered dish, and pour over a batter made of 1 quart milk, 4 eggs, 4 large spoons flour, salt, and bake an hour.

Veal Liver cut thin, rub with flour or Indian, and fry in salt pork fat till well done, or broil like a steak.

Beef Liver may be cooked same as the veal.

An Economical Dinner.—Cut 1 lb. sausages in thin pieces, with 4 lbs. chopped potatoes, some onions, and add table-spoon flour mixed in one pint water, season, and stew till tender. A pound and half of mutton, or other meat, may be substituted for sausages.

PICKLES.

Pickles.—Use no brass utensils, as the verdigris which the acid corrodes is a powerful poison, and the risk is too great for the object, which is to give the pickles a fine green. Pickles should be kept in stone or glass jars, as the acid eats into and draws out the arsenic and other pernicious particles which are used in the glazing of earthen ware.

Pickle Cucumbers.—Lay them in salt and water strong enough to bear an egg; let them remain a few days, then scald in vinegar to green them, and put them in well covered jars. Or they may remain in the brine, taking them out, soaking them in fresh water, and adding good vinegar a day or two before they are to be eaten. They may be made green by scalding in vinegar with vine or cabbage leaves.

Mangoes.—Cut small holes in the sides of large cucumbers, to extract the seeds, which mix with mustard seeds, horse radish minced fine, add mace, cloves, pepper and salt, mix well, and stuff the large cucumbers or peppers full, and bind up with new thread. Then boil vinegar with pepper, salt, ginger, and mace, and pour it boiling hot over the mangoes 4 successive days, or oftener. Pack away close, filling up with the spiced vinegar. When melons or peppers are used, instead of holes in the sides, cut out the stem, and put in lime for 8 days, and in strong vinegar for 18 days. A little mustard and sweet oil may be added to the stuffing, and chopped garlic, if liked.

PIES.

Mince Pies.—This expensive and unhealthy dish is made thus: boil 3 lbs. lean beef tender, and when cold, chop fine; chop 3 lbs. or less clear beef suet, and mix, sprinkling in a table-spoon salt. Chop fine 6 lbs. apples, and 4 lbs. raisins, and 2 lbs. currants well washed, add all to the meat, season with a spoonful cinnamon and powdered nutmeg, pounded mace and cloves, and 1 lb. brown sugar, half pound citron, grated orange peel, and thin it with good cider, and mix all well together.

Another.—2 lbs. lean beef boiled, 1 lb. suet chopped fine, 3 lbs. apples, 2 lbs. raisins or currants, 1 lb. sugar, season and moisten with new cider or cream. Make a good paste, and bake an hour.

To have Mince at any time.—Prepare as above, put in earthen pot, pound it down and cover with best molasses, and keep it from freezing.

Beets cut in square pieces, and add vinegar, sugar and spices, makes a delicate, beautiful pie.

Lemon Pies.—3 good lemons, pare and slice thin, add a tea-cup sugar, a tea-cup molasses, and a tea-cup of water. Sprinkle in a little flour, and bake as a gooseberry pie, which in taste it resembles.

PRESERVES.

Glass is the best for preserves. Cover tight and keep dry.

Currants may be preserved without sugar, by carefully cutting the fruit from the stalks so as not to wound it, when quite dry. Drop the currants in bottles, which stop tight with cork and bury in the garden, neck down.

Cherries and damsons may be preserved in the same way.

Fruit, to preserve, is better not over ripe.

Good sugar is cheaper in the end than poor, for preserves.

Raspberry Jam.—Weigh equal parts of sugar and raspberries. Mash and boil the fruit, then add the sugar; when it boils skim well and let it boil 20 minutes.

Strawberry Jam is made same as the raspberry.

Peach Jam.—Wipe, stone, and boil, adding one-third sugar.

Another.—Peel and stone, mash the peaches over a fire till hot, then rub through a sieve, and add a pound of loaf-sugar to each pound of peach pulp, boil 12 minutes, and skim.

Quinces.—Preserve by paring thin, cut in quarters, and to every five pounds add three pounds sugar, and half pint water. Cover tight, and simmer gently 3 hours. Or they may be preserved whole.

Currant Jelly.—Strain the juice, add pound and quarter sugar to each pint juice. Boil gently, and skim till it is clear.

Raspberry and strawberry jelly is made same as the currant.

Apple Jelly.—4 lbs. apples, pared, chopped, and boiled to juice pulp, 3 lbs. sugar, boil to a jelly, and flavour with lemon.

DRINKS.

Table Beer, cheap and wholesome. 8 bottles water, 1 quart molasses, 1 pint yeast, 1 table-spoon cream tartar, mixed and bottle in 24 hours.

Ginger Beer.—4 dozen bottles may be made of 3 oz. good ginger, 3 lbs. sugar, 1 oz. cream tartar, 2 lemons, 1 gill strong yeast, 3 and a half gallons water. Boil the ginger and sugar 25 minutes, then pour it on the sliced lemon and tartar, mix, and when milk-warm, add the yeast. Let it work 2 or 3 days, and skim it well. Strain it into a cask, bunged tight, and in a couple weeks, draw off and bottle, tying the cork down. If necessary, add a little more yeast.

Temperance Beverage—10 gals. water, 15 lbs. lump sugar, whites of 8 eggs, well beat and strained; mix cold; boil and skim well, add half pound ginger, and boil 20 minutes. Pour the liquor on the thin rinds of 7 lemons; when cool, pour in cask with 2 spoons yeast, stir 2 oz. isinglass shavings in 1 quart of the warm fluid, and put all in the cask. Next day stop it up, and in 3 weeks bottle, and in 3 months it will be a delicious and safe drink.

Another.—20 quarts water, 5 lbs. sugar, 5 oz. white ginger, 1 oz. stick liquorice, boil well together, and add, when cold, a little good yeast, barrel for ten days, and then bottle it, putting a lump white sugar in each bottle.

Spruce Beer.—Pour 8 gallons boiling water in a cask containing 8 gallons cold water, then add 16 lbs. molasses, and a strong decoction of the small twigs and leaves of the spruce, or a few table-spoons essence of spruce, mix well, and then add half pint good yeast; keep in temperate place, with the bung-hole open till sufficiently worked, then bottle it, and drink in a day or two.

Another.—1 oz. hops and spoonful ginger to each gal. water, boil, strain, and add 1 pint molasses, and half ounce essence of spruce. When cool, add tea-cup yeast, and let it ferment in a clean tight cask till done, and then bottle. Sprigs of spruce fir may be boiled instead of the essence.

Switchel, a pleasant, wholesome drink, is made of molasses, vinegar and water, mixed in suitable proportions.

Common Beer.—2 gallons water, large handful hops, fresh gathered spruce, or sweet fern, and 1 quart wheat bran; boil 2 or 3 hours, strain and stir in, while hot, 2 cups molasses. When lukewarm, pour in a clean barrel, and add a pint yeast. Shake it well together, and use next day.

Lemonade.—3 lemons and half pound loaf sugar to 1 pint of water, makes a strong lemonade, pleasant, salubrious and refreshing.

Water is the best beverage of the healthy. Bad water is doubtless injurious. It may be improved by filtering, which cools and purifies it.

Filter water by putting a bit of sponge in the hole at the bottom of a common flour pot, or spread a piece of

flannel over the bottom of a vessel perforated with one or more holes, then over the flannel spread a layer of fine charcoal, and over this a layer or bed of fine sand, four or five inches thick, through all of which the water will filter clear as chrysal.

Rain Water is the best for drinking, cooking or washing, when it can be had pure. Every house should have a reservoir in which to collect rain water, which always, with, and sometimes without, filtering, will be found an advantage, especially where water is impure and hard.

PASTE.

For Pies, 6 oz. butter, 8 oz. flour, worked well together, with as little water as possible. Roll out thin.

Another.—Quarter pound lard or suet, large table-spoon butter, pound flour and water enough to mix stiff. Roll thin.

For Tarts, 1 oz. sifted loaf sugar, 1 lb. flour, make into stiff paste, with 1 gill boiling cream, 3 oz. butter. Work it well, and roll out thin.

Custard Pudding.—1 pint milk, 3 large spoons flour, 6 eggs, salt, sugar and spice to your taste.

Another.—2 eggs and 3 large spoons sugar beat light, 1 pint milk, and spice to your taste. Bake in cups or in paste.

Cup Cake.—3 cups sugar, 1 butter, 5 flour, 3 eggs, tea-spoon pearl ash, all beat together, with spice as you please.

Lemon Ice Cream.—Stir a pound of powdered loaf sugar into a pint of cream, add the grated rind and juice of 5 lemons, or flavour with essence or oil of lemon; mix and beat all gradually into 3 pints of cream. Cover and let it stand an hour, then strain it into the freezer, (a long tin vessel, with a tight lid,) close and stand in the ice tub, which fill with a mixture of equal quantities of coarse salt and ice broken small, that it may lay compact around the freezer. Snow is better than ice. Press down and keep turning till the cream is froze, which will be in 2 hours. Occasionally scrape down the cream. Be careful not to let the salt fall in the cream, and do not freeze so long as to freeze out the flavour.

When cream is deficient, eggs are sometimes beat up with milk, or arrow root is powdered and rubbed smooth in a little cold milk, and added to the cream.

Strawberry Ice Cream.—Hull 2 quarts strawberries, add half pound fine sugar, cover and stand an hour or two, then mash through a sieve till all the juice is pressed out. Stir in sugar enough to make a thick syrup. Then mix by degrees with 2 quarts cream, beating it hard. Freeze as above.

Raspberry, pine-apple, and other fruit ice cream make according to preceding receipt.

Vanilla ice cream made by splitting up half a vanilla bean, boiling it slowly in half pint milk till the flavour is drawn out. Mix it in same as the strawberry, and freeze as directed.

USEFUL DIRECTIONS.

Ink spilt on a carpet take up with a spoon, then pour on clean water and apply the spoon again, and repeat this till the stain is out.

Polish Mahogany by rubbing it once a week with cold drawn linseed oil, wipe off the oil, and rub with a dry cloth.

Flies.—Keep from frames, glass, &c., by boiling 4 leeks in pint water, and washing over with a soft brush.

Flannel.—Wash in hot, clean suds, and never rinse.

Wet Clothes should not be worn near a fire, or so as to occasion sudden heat. Keep in motion till dry can be had, then change at once, and give the feet a long heating.

Black Silks wash in warm small beer and milk.

Windows, clean with a damp linen cloth, then a dry one, then dust over powdered whiting in muslin, which clean off with wash-leather or dry cloth.

Clean Paint without using cloth. Remove dirt with a fine brush. If soiled, dip flannel in pearl ash or soda water, wash and dry quickly.

Grease Spots are removed from cloth, silk, &c., by essence of lemon rubbed on with a rag.

Balls to take out grease spots. Moisten dry fuller's earth with lemon juice, add powdered pearl ash, and mix well, and make in little balls—dry well in the sun. Use by moistening the spots with water, rub on the ball, then dry and brush off.

Moths are kept away by oil of lavender, tobacco, black pepper, or camphor.

Wood, for fuel, should be as dry as possible, as the heat required to evaporate the moisture in green wood is equivalent to a loss of 25 per cent.

Under Beds are made lasting, soft, elastic and sweet from the inner husks of corn.

Grease may be taken out of silk by powdered magnesia applied immediately to the wrong side.

Acid from apple butter, and some other acids, will sometimes decompose the glazing of earthen ware, and renders it a dangerous poison.

Bed Bugs may be removed by a strong decoction of the plant called water pepper, or smart weed. But the best remedy is strict cleanliness.

Pure Wine is made of 3 gallons water, 5 lbs. bloom raisins stoned, put in narrow-mouthed one jug, covered with a fine rag, kept near fire ten days, and then racked off.

Beets roasted like potatoes are sweeter and richer than boiled.

Potatoes.—An Irish journal says: "Put them in a pot or kettle without a lid, with water just sufficient to cover them; after the water has come nearly to boil, pour it off, replace it with cold water, into which throw a good portion of salt—the cold water sends the heat from the surface to the heart, and makes the potatoes mealy—after they are boiled, and the water poured off, let them stand over the fire for 10 or 15 minutes to dry."

Ink on Mahogany.—Take out by diluted vitriol, touch with a feather, then rub it quickly.

Ink.—Make with 2 gallons soft water, pound and half bruised galls, keep near a gentle heat for 2 or 3 weeks, stirring often; then add half pound each of coppers, logwood chips, and gum arabic, some loaf sugar, lemon peel, and gill brandy.

Starch.—Peel and grate a quantity of potatoes, put the pulp in a coarse cloth, and press between two boards to a dry cake. The juice so pressed out, mix with equal quantity of water, and the starch settles at the bottom.

A Creaking Door prevent by rubbing soap or oil on the hinges.

Grease from boards or stone remove by strong ley of pearl ash mixed with as much unslacked lime as it will take up. Let it settle and bottle for use. When used, weaken with water, and scour off very quick, to prevent taking out the colour.

Crickets or roaches destroy by laying yellow snuff on their holes, wafers or assiætida or elder bushes.

Iron mould, ink or mildew, take out of linen, (white only,) by oxalic acid.

Another.—Take out mildew by soft soap mixed with powdered starch, half as much salt, and the juice of lemon. Touch both sides, and lay on the grass night and day.

Many stains may be removed by dipping in sour milk, drying in hot sun, and wash in cold water.

Milk of Roses.—Mix 4 oz. oil almonds, half gill rose water, 40 drops oil of tartar.

Pomatum.—Beat a pound lard in water, then soak and beat in two rose waters, drain and beat with gill brandy. Let it drain from this, scent as you please, and keep it in small pots.

Cheese Whey is an exceedingly wholesome drink.

Carpets wear longer the oftener they are shook, as dust beneath grinds out. Never use a stiff broom, but keep a soft one or brush purposely for the carpet.

Straw carpet or matting wash with salt and water, and wipe with a clean dry cloth.

To black a hearth, boil black lead, soft soap, and a little water.

Clean Brass with flannel dipped in oil, then rub with fine rotten stone, and polish with wash leather.

Isinglass is a delicate starch for fine muslins.

Bed Curtains are unbecomingly, from confining the air. *Old Bread* is much improved by steaming it, or warming it over.

Keep lard in tin, salt pork fat in glazed earthen, salt in dry place, meal in cool, dry place, ice in the cellar, wrapped in flannel, vinegar in wood or glass.

Butter may be kept sweet for many months by 2 parts salt, 1 part loaf sugar pounded and well mixed; 1 ounce well mixed with each pound butter, and close up in a proper vessel.

Sore Throat.—Take a glass of olive or sweet oil, and a half a glass of the spirits of turpentine, mix them well together, and rub the throat externally, wearing flannel around it at the same time.

Whitewash.—Take clean lumps of well burnt lime, (say five or six quarts,) slack the same with hot water in a tub, (covered to keep in the steam,) pass it in the fluid form through a fine sieve; add one-fourth of a pound of whitening or burnt alum, pulverised; one pound of good sugar, three pints of rice flour, made into a thin and well boiled paste, and one pound of clean glue, dissolved by first soaking it well, and then putting it into a small kettle, which should be put into a large one filled with water, and placed over a slow fire. Add five gallons of hot water to the whole mixture. Apply with a painter's brush warm, if upon the outside of the building—if within doors, cold. It will retain its brilliancy for many years.

A Durable Whitewash.—Before putting your lime, which should be unslacked, into the water, saturate the water with muriate of soda, (common salt.)

Beds, instead of being made up as soon as people rise out of them, ought to be turned down, and exposed to the fresh air from the open windows through the day.

To purify Water.—A table-spoonful of finely pulverised alum sprinkled into a barrel of water, the water stirred briskly.

Blackening.—8 oz. ivory black, 6 oz. molasses, 6 table-spoons sweet oil, 3 do. oil of vitriol, mix with 1 quart vinegar, bottle and use in a week.

Filthy smells in gutters, &c., obviate by using water in which lime has been slacked, mixed with ley of ashes, or soapy water that has been used in washing.

Charcoal, when burning, should have an uncovered vessel of boiling water over it, the vapour of which will counteract the deleterious fumes.

Powdered Charcoal will remove smells, impurities, &c., from old glass vessels, after the grosser parts have been scoured off with sand and potash.

A Perfume for linen, &c., is made of rose leaves dried in the shade, mixed with powdered cloves, scraped mace, and put in little bags.

Cement China with lime sifted through fine muslin, to be dusted on after the edges are moistened with white of egg. Join quickly, and tie secure.

Rust on Steel remove by sweet oil first, and in 48 hours rub with unslacked, powdered lime.

Mend iron pots, pans, &c., by sifted lime mixed with well beaten whites of eggs till reduced to paste, then add iron file dust, and cover the cracks, &c.

Mend Glass or China with 2 quarts litharge, 1 quick lime, and 1 of flint glass, separately powdered fine, and worked into a paste with drying oil.

Marble iron stains remove with spirits of vitriol and lemon juice mixed, wet the spots, and in few minutes rub with soft linen.

Clean Teeth.—1 quart soft water, 2 oz. lemon juice, 6 grains burnt alum, 6 grains salt. Mix. Boil a minute, strain and bottle for use. Rub teeth once a week with it. See page 29.

White Teeth.—Use a mixture of honey with purest pulverised charcoal, but not so often as to wear the enamel of the teeth.

Fire in chimneys extinguish by closing doors and windows, and throwing on the coals water, a handful flour of sulphur, or salt, and stop up the fire-place tight, so as to shut off all draft.

Substitute for Tea.—5 parts of petals of red rose dried, 1 part rosemary leaves, 2 parts balm leaves. Mix. A desert-spoonful makes half a pint of infusion. Use with cream and sugar, same as tea. Instead of the injury to the nervous system which foreign tea occasions, this is found to strengthen the stomach and nerves, and keep up a healthy digestion. It is not only far more healthy, but more economical, and quite as palatable.

Another.—Young strawberry flowers and leaves dried, not in the sun, but in the air, and not washed, and used same as China tea, are used in Germany, and found a good substitute; also, young and tender leaves of the sloe tree, or black thorn, properly dried.

Hair.—Honey water promotes its growth, made by mixing 4 lbs. honey, and 2 lbs. dry sand in a large vessel; distil with gentle heat, to a yellowish acid water. —See page 29.

Sugar Vinegar.—1 gallon water, 2 lbs. brown sugar, and little yeast. Expose 6 months to the sun.

Cream and milk can be very well imitated by beating an egg, and then pouring boiling tea over it gradually, to prevent its curdling.

Bread should never be eaten until 1 day old. Unless where the digestive powers of an ostrich are possessed, fresh hot bread will sooner or later bring on Dyspepsia, with its train of miseries.

AMERICAN POCKET LIBRARY OF USEFUL KNOWLEDGE.

With upwards of One Thousand Valuable Recipes.

GENERAL CONTENTS.

AGRICULTURE. Comprising a mass of information on the management of Soil, Manures, Grass, Grain, Roots, Horses, Cattle, the Dairy, &c., &c., carefully gleaned and condensed from the papers of the Philadelphia Agricultural Society, the agricultural papers of the day, and the actual experience of the best practical Farmers.

HEALTH. Furnishing instructions for the treatment of Wounds, Poisons, Bruises, and diseases generally, and especially for the PRESERVATION of Health; condensed, in part, from the Journal of Health, conducted by an Association of Physicians, and edited by Dr. Bell, the best medical writer in the United States, and which has received the sanction of Professors in the University of Pennsylvania and others. Containing, in addition, a large number of valuable recipes, &c., all of which may at times be of importance to families and individuals.

POLITICAL. The Constitution of the United States, entire, with the Amendments, a national document which should be in the possession of every Freeman. Also, the year in which each State was settled, and by whom, number of square miles, time of holding Elections, qualification of Voters, Members of Congress, Electors, &c., in each State in the Union, Office Hunters, &c., by Judge Hopkinson.

SUGAR BEET. Here is furnished ample instructions for the cultivation of the Sugar Beet, by James Ronaldson, Esq., who visited Europe expressly for the purpose of adding to the agricultural products of the United States.

SILK CULTURE. Comprising the Manual for producing and reeling Silk, growing the Foliage, managing the Eggs, Worms, and Cocoons, including the whole process of Silk making, as approved by the Legislature of Pennsylvania, on the Report of Committees recommending the purchase of two large editions.

HORTICULTURE. Cultivation of Flowers, Plants, Fruits, Vines, &c., by Henry A. Dreer, Seedsman and Florist.

BIRDS. Instructions for the feeding and general management of Canaries, Mocking, and other favourite songsters.

TEMPERANCE. A comprehensive outline of the great Temperance movement, and a Certificate to the Young Men of the United States, by Ex-presidents Madison, Jackson, Adams and Van Buren, accompanied by engraved facsimiles of the signatures as written by each of those distinguished statesmen.

CANALS AND RAIL ROADS. All in the United States, their Length, Location, Profits, &c., and Tables showing the comparative advantages of Animal and Mechanical labour.

RELIGION. Enumeration of different Sects, Washington's Farewell Address, the Atheist, &c.

STATISTICS. Valuable and interesting Statistical Tables, showing the amount of Grain of all kinds, Hay, Cotton, Sugar, Wine, Lumber, Wool, Horses, Mules, neat Cattle, in each and every State in the Union, together with the Population of the whole Country, Cities, Towns, &c.

COOKERY. Nutriment in different Food, Directions for making Soups, Roasting, Boiling, Dressing, &c., Pies, Puddings, Preserves, Pickles, Pastry, Cakes, &c., with useful Recipes, on a variety of culinary and household affairs.

ALSO. A Treatise on the preservation, health and beauty of the TEETH, compiled from the best Dentists. The growth and beauty of the HAIR, by J. Dalzell Moore, the superior Hair Dresser. The engraved Alphabet for the DEAF and DUMB.

THE LAW. Important Advice to EMIGRANTS and WESTERN SETTLERS, by Rev. J. Flint, the result of sixteen years' experience in the West. MANUFACTURES, FOREIGN TRADE, Value of FOREIGN MONEYS as fixed by Law. Comparative WEIGHTS and MEASURES in different Foreign Ports.

GIRARD'S WILL. and an engraving of the College for Orphans. THOMPSONISM, showing all the plants &c., used in the BOTANIC PRACTICE of Medicine, with their properties, Mode of Administering, &c., &c., with valuable Directions, Recipes, &c., amounting in all to UPWARDS OF ONE THOUSAND.

ENGRAVINGS. Miniature Portraits of the Nine Presidents of the United States. Girard College. Four Phrenological Heads, and New Patent Office, and the splendid NATIONAL GALLERY at Washington.

INDEX.

A.	Page		Page	O.	Page
AGRICULTURE, its Importance...	2	Dissemination, its Appalling Fruits...	27	Oxen	6
Superior Farming.....	3	DENTISTRY, comprising full Di-		Office Hunters, by Judge Hopkin-	44
Philadelphia Agricult. Society...	3	rections for the Care and Preser-			
Improved Mode of Feeding....	4	vation of Teeth.....	29	P.	
Manures.....	4	District School.....	39	Presidents, Nine, Portraits of... 1, 64	
Ploughing, best modes, &c....	4	Deaf and Dumb.....	41	Files.....	23
Grains, Nature and Cultivation		Distances, Tables of.....	47	Poultry.....	9
of.....	5	E.		Plants.....	14
Grass, Potatoes, &c.....	6	Editors, Duties, Responsibilities,		Puddings.....	58
Feeding and Management of		&c. of.....	18	Plum Pudding.....	58
Stock.....	7	Economical Dinner.....	59	Pickles, to Make.....	59
The Horse, with Ample In-		Exercise, Importance of.....	20	Preserves, to Make.....	59
structions.....	8	Early Rising.....	20	Paste for Pies, &c.....	60
To Make Fences.....	8	Eye Sight.....	23	Pruning.....	14
Deep Ploughing.....	9	Emigrants, Advice to.....	36	Public Health.....	19
Soiling Cattle.....	9	Education.....	39	POISONS, Antidotes for.....	23, 52
Stall Feeding.....	3	Election of 1849.....	43	Phrenology, with Engraved Heads	31
Successful Farming.....	10	Extent of each State.....	45	Patent Office and Patent Laws....	36
General Directions, embracing		Elections, when held in each State	45	Post Office and Public Lands.....	37
a number of Useful Receipts		Electors, number of in each State	48	Population of United States.....	56
in Farming.....	9	F.		Population of Cities and Towns....	56
Apple Pudding, to Make.....	58	Flowers, Cultivation of, by Henry		Q.	
Althca.....	14	A. Dreer, Seedsman and Florist...	13	Quackery, Domestic.....	20
Accidents and Remedies.....	23	Frost or Icing for Cakes.....	59	Quinces, to Preserve.....	60
Adulterated Liquors—Remedy For-		Fruit Trees.....	15	R.	
ward.....	27	Food, Abuse of, &c.....	20	Roses.....	14
Atheist.....	27	Fasting, Benefits of.....	22	Reeling Silk.....	16
Army.....	37	Fruits of Temperance.....	27	Receipts, Remedies, &c.....	23
Antidotes for Various Poisons..	23, 52	Foreign Moneys, Value of as fixed		Rheumatism, Cure for.....	23
Alphabet for Deaf and Dumb....	41	by Law.....	53	Rail-Roads and Canals.....	32
Advice in Law.....	42	G.		Religion in the United States....	33
Animal and other Food, Nutrient		Ginger Beer, to Make.....	60	S.	
of.....	57	Ginger, Medical Qualities of.....	25	Spruce Beer.....	60
Agricultural Statistics.....	54	Girard College.....	38	Sheep.....	8
Amendments to the United States		H.		Successful Farming.....	10
Constitution.....	62	Hogs, to Keep.....	8	Small Farms, to Cultivate.....	11
B.		Honeyuckles, to Cultivate.....	14	SUGAR BEET, Complete Instruc-	
BEES, Rearing and Management		HEALTH, Means of Securing it..	24	tions for its Culture, by J. mes	
of.....	8	Heart Burn, Acidity, &c.....	21	Ronaldson.....	11
Birds, Feeding, Training, and Ge-		Hair, on its Growth and Beauty,		SILK, Manual for producing Silk,	
neral management of.....	17	by J. Dalziel Moore.....	23	approved by the Legislature of	
Bread to Make, &c.....	58	Hemlock, its Uses.....	25	Pennsylvania.....	15
Bread Pudding.....	58	Home versus Taverns.....	28	Sick Birds.....	17
Beer, to Make.....	60	Horses, Treatment of.....	5	Sprains and Bruises.....	20
Bruises and Sprains, to Cure....	20	Headache, Cause and Remedy....	21	Scalds and Burns.....	20
Burns and Scalds, Remedies for	20	I.		Sumach, its Medical Virtues.....	25
Bilious Disorders.....	21	Icing for Cakes.....	59	Squaw Weed, Qualities of.....	25
Beds of Feathers, Evils of.....	23	Ice Cream, to Make.....	60	Seeds, Directions for.....	36
Bleeding, its Danger, also when Ne-		Impure Air, its Evils.....	20	Schools.....	39
cessary, and how Performed....	24	INTEMPERANCE, its Deploable		Soups, to Make.....	57
Botanic Practice, or Thompsonian		Evils, Public and Private Mis-		States, Population of.....	46
Explained, with Description of		eries, &c.....	26, 27	Settlement of the several States..	45
all the Plants, Roots, &c., Mode		L.		Soils, Treatment of.....	3
of Gathering, Administering, &c.	25	Lobelia, or Emetic Herb, Account		T.	
Bayberry, its Properties.....	25	of.....	25	Toast and Water.....	21
Bitter Herb, its Use.....	25	Laws of Naturalization.....	36	Tight Dressing, its Evils.....	21
Bible.....	40	Laws, The.....	42	Thin Shoes, Advice about.....	23
C.		Legislatures, Meetings of in each		Toothache Cured.....	23
Cows, Management of.....	8	State.....	45	Tetter.....	23
Cocoaneries.....	16	M.		Thompsonism.....	25
Canaries.....	17	Macaroons.....	58	TEMPERANCE, Important Testi-	
Causes of Disease.....	20	Mocking Bird.....	18	mony of.....	26
Cleanliness, Importance of.....	20, 24	Modern Cookery Pernicious.....	20	Tetotalism, its Blessings.....	27
Clothing, Defective, &c.....	21	Mechanics and Workmen, their		Travelling Routes.....	47
Cold, Influence of.....	21	Interests.....	28	U.	
Costiveness.....	21	Mothers, Duty of.....	34	Useful Directions.....	60
Corsets, abuse of.....	23	Mint, United States.....	37	V.	
Consumption, or Thompsonian		Moral of the Election.....	43	Vegetables.....	12, 23
Croup, its Danger and Cure....	23	Meats, to Cook.....	57	Vines.....	14
Cough, Cure for.....	25	Measures and Weights, Compar-		Vinegar, its Virtues.....	23
Cayenne, its Medical Properties..	25	ative Tables in Foreign Ports....	53	Voters, Qualifications of in each	
Custard Pudding.....	58, 60	Medicine.....	19	State.....	45
Cakes.....	58, 59	Medicinal Herbs.....	25	W.	
Canals and Rail-Roads.....	32	Moneys Foreign, value of as fixed		Wounds, Dressing and Care of... 19	
Christian.....	38	by Law.....	53	Water, to Purify.....	23
Capital Punishment.....	48	N.		White Hazel, its Virtues.....	25
Constitution of the United States		Neat Cattle.....	7	WORLD, Extent and Population of	50
Cookery.....	57	Newspapers.....	18	Women, Influence of, by Judge	
D.		Newsfulness.....	21	Hopkinson.....	34
Duties on Importations.....	17	Naturalization.....	36	Western Settlers, Advice to.... 36	
Diet.....	19	Navy.....	37	Washington's Farewell Address, \$3, 44	
How most wholesome.....	24			Weights and Measures, Compar-	
Drowned Persons, Recovery of... 20				ative Tables in Foreign Ports....	53
Death, Cause of among Women..	22			Water, to Filter.....	60

C. SHERMAN AND CO., PRINTERS,
19, ST. JAMES STREET, PHILADELPHIA.
